PART 1 — PRACTICE AND PROCDURE

Subpart F — Wireless Radio Services Applications and Proceedings

§ 1.913 Application and notification forms; electronic filing

(a) ***Application and notification forms***. Applicants, licensees, and spectrum lessees (see § 1.9003) shall use the following forms and associated schedules for all applications and notifications:

(1) ***FCC Form 601, Application for Authorization in the Wireless Radio Services.*** FCC Form 601 and associated schedules are used to apply for initial authorizations, modifications to existing authorizations, amendments to pending applications, renewals of station authorizations, special temporary authority, notifications, requests for extension of time, and administrative updates.

(2) ***FCC Form 602, Wireless Radio Services Ownership Form.*** FCC Form 602 is used by applicants and licensees in auctionable services to provide and update ownership information as required by §§ 1.919, 1.948, 1.2112, and any other section that requires the submission of such information.

(3) ***FCC Form 603, Application for Assignment of Authorization or Transfer of Control.*** FCC Form 603 is used by applicants and licensees to apply for Commission consent to assignments of existing authorizations, to apply for Commission consent to transfer control of entities holding authorizations, to notify the Commission of the consummation of assignments or transfers, and to request extensions of time for consummation of assignments or transfers. It is also used for Commission consent to partial assignments of authorization, including partitioning and disaggregation.

(4) ***FCC Form 605, Quick-form Application for Authorization for Wireless Radio Services.*** FCC Form 605 is used to apply for Ship, Aircraft, and General Mobile Radio Service (GMRS) authorizations, as well as Commercial Radio Operator Licenses.

(5) ***FCC Form 608, Notification or Application for Spectrum Leasing Arrangement.*** FCC Form 608 is used by licensees and spectrum lessees (see § 1.9003) to notify the Commission regarding spectrum manager leasing arrangements and to apply for Commission consent for de facto transfer leasing arrangements pursuant to the rules set forth in part 1, subpart X. It is also used to notify the Commission if a licensee or spectrum lessee establishes a private commons (see § 1.9080).

(6) ***FCC Form 609, Application to Report Eligibility Event.*** FCC Form 609 is used by licensees to apply for Commission approval of reportable eligibility events, as defined in § 1.2114.

(b) ***Electronic filing.*** Except as specified in paragraph (d) of this section or elsewhere in this chapter, all applications and other filings using the application

and notification forms listed in this section or associated schedules must be filed electronically in accordance with the electronic filing instructions provided by ULS. For each Wireless Radio Service that is subject to mandatory electronic filing, this paragraph is effective on July 1, 1999, or six months after the Commission begins use of ULS to process applications in the service, whichever is later. The Commission will announce by public notice the deployment date of each service in ULS.

(1) Attachments to applications and notifications should be uploaded along with the electronically filed applications and notifications whenever possible. The files, other than the ASCII table of contents, should be in Adobe Acrobat Portable Document Format (PDF) whenever possible.

(2) Any associated documents submitted with an application or notification must be uploaded as attachments to the application or notification whenever possible. The attachment should be uploaded via ULS in Adobe Acrobat Portable Document Format (PDF) whenever possible.

(c) ***Auctioned license applications.*** Auctioned license applications, as defined in § 1.907 of this part, shall also comply with the requirements of subpart Q of this part and the applicable Commission orders and public notices issued with respect to each auction for a particular service and spectrum.

(d) [Reserved]

(e) ***Applications requiring prior coordination.*** Parties filing applications that require frequency coordination shall, prior to filing, complete all applicable frequency coordination requirements in service-specific rules contained within this chapter. After appropriate frequency coordination, such applications must be electronically filed via ULS. Applications filed by the frequency coordinator on behalf of the applicant must be filed electronically.

(f) ***Applications for amateur licenses.*** Applications for amateur licenses will be processed by the Amateur Radio Administrator under the procedures authorized in § 97.605. Amateur radio license grants will be recorded in the Amateur Radio Licensing System authorized in § 97.603.

(g) ***Section 337 Requests.*** Applications to provide public safety services submitted pursuant to 47 U.S.C. 337 must be filed on the same form and in the same manner as other applications for the requested frequency(ies), except that applicants must select the service code reflective of the type of service the applicant intends to provide.

PART 2 — FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

Subpart D — Call Signs and Other Forms of Identifying Radio Transmissions

§ 2.302 Call signs.

The table which follows indicates the composition and blocks of international call signs available for assignment when such call signs are required by the rules pertaining to particular classes of stations. When stations operating in two or more classes are authorized to the same licensee for the same location, the Commission may elect to assign a separate call sign to each station in a different class. (In addition to the U.S. call sign allocations listed below, call sign blocks AAA through AEZ and ALA through ALZ have been assigned to the Department of the Army; call sign block AFA through AKZ has been assigned to the Department of the Air Force; and call sign block NAA through NZZ has been assigned jointly to the Department of the Navy and the U.S. Coast Guard.

Class of station	Composition of call sign	Call sign blocks
Coast (Class I) except for coast telephone in Alaska	3 letters	KAA through KZZ. WAA through WZZ.
Coast (Classes II and III) and maritime radio-determination	3 letters, 3 digits	KAA200 through KZZ999. WAA200 through WZZ999.
Coast telephone in Alaska	3 letters, 3 digits 3 letters, 3 digits (for stations assigned frequencies above 30 MHz)	KAA20 through KZZ99. WAA20 through WZZ99. WAA200 through WZZ999.
Fixed	3 letters, 2 digits 3 letters, 3 digits (for stations assigned frequencies above 30 MHz)	KAA20 through KZZ99. WAA20 through WZZ99. WAA200 through WZZ999.
Marine receiver test	3 letters, 3 digits (plus general geographic location when required)	KAA200 through KZZ999. WAA200 through WZZ999.
Ship telegraph	4 letters[1]	KAAA through KZZZ. WAAA through WZZZ.

[1] Ships with transmitter-equipped survival craft shall be assigned four letter call signs.

Ship telephone	2 letters, 4 digits, or 3 letters, 4 digits[1]	WA2000 through WZ9999, through WZZZ999.
Ship telegraph plus telephone	4 letters	KAAA through KZZZ. WAAA through WZZZ.
Ship radar	Same as ship telephone and/or telegraph call sign, or, if ship has no telephone or telegraph: 2 letters, 4 digits or 3 letters, 4 digits	WA2000 through WZ9999, through WZZZ999.
Ship survival craft	Call sign of the parent ship followed by 2 digits	KAAA20 through KZZZ99. WAAA20 through WZZZ99.
Cable-repair ship marker buoy	Call sign of the parent ship followed by the letters “BT” and the identifying number of the buoy	
Marine utility	2 letters, 4 digits	KA2000 through KZ9999.
Shipyard mobile	2 letters, 4 digits	KA2000 through KZ9999.
Aircraft telegraph	5 letters	KAAAA through KZZZZ. WAAAA through WZZZZ.
Aircraft telegraph and telephone	5 letters[2]	KAAAA through KZZZZ. WAAAA through WZZZZ.
Aircraft telephone	5 letters[2] (whenever a call sign is assigned)	KAAAA through KZZZZ. WAAAA through WZZZZ.
Aircraft survival craft	Whenever a call sign[2] is assigned, call sign of the parent aircraft followed by a single digit other than 0 or 1.	
Aeronautical	3 letters, 1 digit[2]	KAA2 through KZZ9. WAA2 through WZZ9.
Land mobile (base)	3 letters, 3 digits	KAA200 through KZZ999. WAA200 through WZZ999.
Land mobile (mobile telegraph)	4 letters, 1 digit	KAAA2 through KZZZ9. WAAA2 through WZZZ9.

[2] See § 2.303

Land mobile (mobile telephone)	2 letters, 4 digits	KA2000 through KZ9999. WA2000 through WZ9999.
Broadcasting (standard)	4 letters[3] (plus location of station)	KAAA through KZZZ. WAAA through WZZZ.
Broadcasting (FM)	4 letters (plus location of station)	KAAA through KZZZ. WAAA through WZZZ.
Broadcasting with suffix "FM"	6 letters[3] (plus location of station)	KAAA-FM through KZZZ-FM. WAAA-FM through WZZZ-FM.
Broadcasting (television)	4 letters (plus location of station)	KAAA through KZZZ. WAAA through WZZZ.
Broadcasting with suffix "TV"	6 letters[3] (plus location of station)	KAAA-TV through KZZZ-TV. WAAA-TV through WZZZ-TV.
Television broadcast translator	1 letter—output channel number—2 letters	K02AA through K83ZZ. W02AA through W83ZZ.
Disaster station, except U.S. Government	4 letters, 1 digit	KAAA2 through KZZZ9. WAAA2 through WZZZ9.
Experimental (letter "X" follows the digit)	2 letters, 1 digit, 3 letters	KA2XAA through KZ9XZZ. WA2XAA through WZ9XZZ.
Standard frequency		WWV, WWVB through WWVI, WWVL, WWVS
Personal radio	3 letters, 4 digits, or 4 letters, 4 digits.	KAA0001 through KZZ9999, WAA0001 through WPZ9999 KAAA0001 through KZZZ9999.
Personal radio, temporary permit	3 letters, 5 digits	KAA00000 through KZZ99999.
Personal radio in trust territories	1 letter, 4 digits	K0001 through K9999.
Business radio temporary permit	2 letters, 7 digits	WT plus local telephone number.

[3] A 3 letter call sign now authorized for and in continuous use by a licensee of a standard broadcasting station may continue to be used by that station. The same exception applies also to frequency modulation and television broadcasting stations using 5 letter call signs consisting of 3 letters with the suffix "FM" or "TV".

Part 90 temporary permit	2 letters, 7 digits	WT plus local telephone number.
Part 90 conditional permit	2 letters, 7 digits	WT plus local telephone number.
General Mobile Radio Service, temporary permit	2 letters, 7 digits	WT plus business or residence telephone number.

PART 97 — AMATEUR RADIO SERVICE

Subpart A — General Provisions

§ 97.1 Basis and purpose.

The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

(a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.

(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.

(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.

(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

(e) Continuation and extension of the amateur's unique ability to enhance international goodwill.

§ 97.3 Definitions.

(a) The definitions of terms used in part 97 are:

(1) ***Amateur operator.*** A person named in an amateur operator/primary license station grant on the ULS consolidated licensee database to be the control operator of an amateur station.

(2) ***Amateur radio administrator (ARA).*** An organization designated by the FCC to administer license grants for the amateur radio services as described in Subpart G.

(3) ***Amateur radio services.*** The amateur service, the amateur-satellite service and the radio amateur civil emergency service.

(4) ***Amateur service.*** A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

(5) ***Amateur station.*** A station in an amateur radio service consisting of the apparatus necessary for carrying on radiocommunications.

(6) ***ARLS (Amateur Radio Licensing System).*** The system established by § 97.603 and administered by the Amateur Radio Administrator which serves as a consolidated database of license grants for the Amateur Radio Service.

(7) ***Automatic control.*** The use of devices and procedures for control of a station when it is transmitting so that compliance with the FCC Rules is achieved without the control operator being present at a control point.

(8) ***Auxiliary station.*** An amateur station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations.

(9) ***Bandwidth.*** The width of a frequency band outside of which the mean power of the transmitted signal is attenuated at least 26 dB below the mean power of the transmitted signal within the band.

(10) ***Beacon.*** An amateur station transmitting communications for the purposes of observation of propagation and reception or other related experimental activities.

(11) ***Broadcasting.*** Transmissions intended for reception by the general public, either direct or relayed.

(12) ***Call sign system.*** The method used to select a call sign for amateur station over-the-air identification purposes. The call sign systems are:

(i) ***Sequential call sign system.*** The call sign is selected by the ARA from an alphabetized list corresponding to the geographic region of the licensee's mailing address and operator class. The call sign is shown on the license.

(ii) ***Vanity call sign system.*** The call sign is selected by the ARA from a list of call signs requested by the licensee. The call sign is shown on the license.

(iii) ***Special event call sign system.*** The call sign is selected by the station licensee from unassigned call signs specified in § 97.607(a) for use for a specific and relevant period of time to commemorate a special event or for use in a recognized amateur radio contest. The special event call sign is substituted for the call sign shown on the station license grant while the station is transmitting.

(13) ***CEPT.*** The European Conference of Postal and Telecommunications Administrators.

(14) ***CEPT radio amateur license.*** A license issued by a country belonging to CEPT that has adopted Recommendation T/R 61-01 (Nice 1985, Paris 1992, Nicosia 2003).

(15) ***Control operator.*** An amateur operator designated by the licensee of a station to be responsible for the transmissions from that station to assure compliance with the FCC Rules.

(16) ***Control point.*** The location at which the control operator function is performed.

(17) ***CSCE.*** Certificate of successful completion of an examination.

(18) ***Earth station.*** An amateur station located on, or within 50 km of, the Earth's surface intended for communications with space stations or with other Earth stations by means of one or more other objects in space.

(19) ***External RF power amplifier.*** A device capable of increasing power output when used in conjunction with, but not an integral part of, a transmitter.

(20) ***FAA.*** Federal Aviation Administration.

(21) ***FCC.*** Federal Communications Commission.

(22) ***Frequency coordinator.*** An entity, recognized in a local or regional area by amateur operators whose stations are eligible to be auxiliary or repeater stations, that recommends transmit/receive channels and associated operating and technical parameters for such stations in order to avoid or minimize potential interference.

(23) ***HAREC (Harmonised Amateur Radio Examination Certificate)***. A certificate issued by a country belonging to CEPT that has adopted Recommendation T/R 61-02 (Chester 19990, Nicosia 1994, The Hague 2001, Vilnius 2004).

(24) ***Harmful interference.*** Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with the Radio Regulations.

(25) ***IARP (International Amateur Radio Permit).*** A document issued pursuant to the terms of the Inter-American Convention on an International Amateur Radio Permit by a country signatory to that Convention, other than the United States. Montrouis, Haiti. AG/doc.3216/95.

(26) ***Indicator.*** Words, letters or numerals appended to and separated from the call sign during the station identification.

(27) ***Information bulletin.*** A message directed only to amateur operators consisting solely of subject matter of direct interest to the amateur service.

(28) ***International Morse code.*** A dot-dash code as defined in ITU-T Recommendation F.1 (March, 1998), Division B, I. Morse code.

(29) ***ITU.*** International Telecommunication Union.

(30) ***Line A.*** Begins at Aberdeen, WA, running by great circle arc to the intersection of 48° N, 120° W, thence along parallel 48° N, to the intersection of 95° W, thence by great circle arc through the southernmost point of Duluth, MN, thence by great circle arc to 45° N, 85° W, thence southward along meridian 85° W, to its intersection with parallel 41° N, thence along parallel 41° N, to its intersection with meridian 82° W, thence by great circle arc through the southernmost point of Bangor, ME, thence by great circle arc through the southernmost point of Searsport, ME, at which point it terminates.

(31) ***Local control.*** The use of a control operator who directly manipulates the operating adjustments in the station to achieve compliance with the FCC Rules.

(32) ***Message forwarding system.*** A group of amateur stations participating in a voluntary, cooperative, interactive arrangement where communications are sent from the control operator of an originating station to the control operator of one or more destination stations by one or more forwarding stations.

(33) ***National Radio Quiet Zone.*** The area in Maryland, Virginia and West Virginia Bounded by 39°15′ N on the north, 78°30′ W on the east, 37°30′ N on the south and 80°30′ W on the west.

(34) ***Question pool.*** All current examination questions for a designated written examination element.

(35) ***Question set.*** A series of examination questions on a given examination selected from the question pool.

(36) ***Radio Regulations.*** The latest ITU Radio Regulations to which the United States is a party.

(37) ***RACES (radio amateur civil emergency service).*** A radio service using amateur stations for civil defense communications during periods of local, regional or national civil emergencies.

(38) ***Remote control.*** The use of a control operator who indirectly manipulates the operating adjustments in the station through a control link to achieve compliance with the FCC Rules.

(39) ***Repeater.*** An amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels.

(40) ***Space station.*** An amateur station located more than 50 km above the Earth's surface.

(41) ***Space telemetry.*** A one-way transmission from a space station of measurements made from the measuring instruments in a spacecraft, including those relating to the functioning of the spacecraft.

(42) ***Spurious emission.*** An emission, or frequencies outside the necessary bandwidth of a transmission, the level of which may be reduced without affecting the information being transmitted.

(43) ***Telecommand.*** A one-way transmission to initiate, modify, or terminate functions of a device at a distance.

(44) ***Telecommand station.*** An amateur station that transmits communications to initiate, modify or terminate functions of a space station.

(45) ***Telemetry.*** A one-way transmission of measurements at a distance from the measuring instrument.

(46) ***Third party communications.*** A message from the control operator (first party) of an amateur station to another amateur station control operator (second party) on behalf of another person (third party).

(47) ***ULS (Universal Licensing System).*** The consolidated database, application filing system and processing system for all Wireless Telecommunications Services.

(48) ***VE.*** Volunteer examiner.

(49) ***VEC.*** Volunteer-examiner coordinator.

(b) The definitions of technical symbols used in this part are:

(1) ***EHF (extremely high frequency).*** The frequency range 30-300 GHz.

(2) ***EIRP (equivalent isotropically radiated power).*** The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain).

Note: Divide EIRP by 1.64 to convert to effective radiated power.

(3) ***ERP (effective radiated power) (in a given direction).*** The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Note: Multiply ERP by 1.64 to convert to equivalent isotropically radiated power.

(4) ***HF (high frequency).*** The frequency range 3-30 MHz.

(5) ***Hz.*** Hertz.

(6) ***LF (low frequency).*** The frequency range 30-300 kHz.

(7) ***m.*** Meters.

(8) ***MF (medium frequency).*** The frequency range 300-3000 kHz.

(9) ***PEP (peak envelope power).*** The average power supplied to the antenna transmission line by a transmitter during one RF cycle at the crest of the modulation envelope taken under normal operating conditions.

(10) ***RF.*** Radio frequency.

(11) ***SHF (super high frequency).*** The frequency range 3-30 GHz.

(12) ***UHF (ultra high frequency).*** The frequency range 300-3000 MHz.

(13) ***VHF (very high frequency).*** The frequency range 30-300 MHz.

(14) ***W.*** Watts.

(c) The following terms are used in this part to indicate emission types. Refer to § 2.201 of the FCC Rules, Emission, modulation and transmission characteristics, for information on emission type designators.

(1) ***CW.*** International Morse code telegraphy emissions having designators with A, C, H, J or R as the first symbol; 1 as the second symbol; A or B as the third symbol; and emissions J2A and J2B.

(2) ***Data.*** Telemetry, telecommand and computer communications emissions having

(i) designators with A, C, D, F, G, H, J or R as the first symbol, 1 as the second symbol, and D as the third symbol;

(ii) emission J2D; and

(iii) emissions A1C, F1C, F2C, J2C, and J3C having an occupied bandwidth of 500 Hz or less when transmitted on an amateur service frequency below 30 MHz. Only a digital code of a type specifically authorized in this part may be transmitted.

(3) ***Image.*** Facsimile and television emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1, 2 or 3 as the second symbol; C or F as the third symbol; and emissions having B as the first symbol; 7, 8 or 9 as the second symbol; W as the third symbol.

(4) ***MCW.*** Tone-modulated international Morse code telegraphy emissions having designators with A, C, D, F, G, H or R as the first symbol; 2 as the second symbol; A or B as the third symbol.

(5) ***Phone.*** Speech and other sound emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1, 2, 3 or X as the second symbol; E as the third symbol. Also speech emissions having B or F as the first symbol; 7, 8 or 9 as the second symbol; E as the third symbol. MCW for the purpose of performing the station identification procedure, or for providing telegraphy practice interspersed with speech. Incidental tones for the purpose of selective calling or alerting or to control the level of a demodulated signal may also be considered phone.

(6) ***Pulse.*** Emissions having designators with K, L, M, P, Q, V or W as the first symbol; 0, 1, 2, 3, 7, 8, 9 or X as the second symbol; A, B, C, D, E, F, N, W or X as the third symbol.

(7) ***RTTY.*** Narrow-band direct-printing telegraphy emissions having designators with A, C, D, F, G, H, J or R as the first symbol; 1 as the second symbol; B as the third symbol; and emission J2B. Only a digital code of a type specifically authorized in this part may be transmitted.

(8) ***SS.*** Spread spectrum emissions using bandwidth-expansion modulation emissions having designators with A, C, D, F, G, H, J or R as the first symbol; X as the second symbol; X as the third symbol.

(9) ***Test.*** Emissions containing no information having the designators with N as the third symbol. Test does not include pulse emissions with no information or modulation unless pulse emissions are also authorized in the frequency band.

Editorial Note: For Federal Register citations affecting § 97.3, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.govinfo.gov.

§ 97.5 Station license required.

(a) The station apparatus must be under the physical control of a person named in an amateur station license grant on the ALRS or a person authorized for alien reciprocal operation by § 97.107 of this part, before the station may transmit on any amateur service frequency from any place that is:

(1) Within 50 km of the Earth's surface and at a place where the amateur service is regulated by the FCC;

(2) Within 50 km of the Earth's surface and aboard any vessel or craft that is documented or registered in the United States; or

(3) More than 50 km above the Earth's surface aboard any craft that is documented or registered in the United States.

(b) The types of station license grants are:

(1) ***An operator/primary station license grant.*** One, but only one, operator/primary station license grant may be held by any one person. The primary station license is granted together with the amateur operator license. Except for a representative of a foreign government, any person who qualifies by examination is eligible to apply for an operator/primary station license grant.

(2) ***A club station license grant.*** A club station license grant may be held only by the person who is the license trustee designated by an officer of the club. The trustee must be a person who holds an operator/primary station license grant. The club must be composed of at least four persons and must have a name, a document of organization, management, and a primary purpose devoted to amateur service activities consistent with this part.

(3) ***A military recreation station license grant.*** A military recreation station license grant may be held only by the person who is the license custodian designated by the official in charge of the United States military recreational premises where the station is situated. The person must not be a representative of a foreign government. The person need not hold an amateur operator license grant.

(c) The person named in the station license grant or who is authorized for alien reciprocal operation by § 97.107 of this part may use, in accordance with the applicable rules of this part, the transmitting apparatus under the physical control of the person at places where the amateur service is regulated by the FCC.

(d) A CEPT radio-amateur license is issued to the person by the country of which the person is a citizen. The person must not:

(1) Be a resident alien or citizen of the United States, regardless of any other citizenship also held;

(2) Hold an FCC or ARA-issued amateur operator license nor reciprocal permit for alien amateur licensee;

(3) Be a prior amateur service licensee whose FCC or ARA-issued license was revoked, suspended for less than the balance of the license term and the suspension is still in effect, suspended for the balance of the license term and relicensing has not taken place, or surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings; or

(4) Be the subject of a cease and desist order that relates to amateur service operation and which is still in effect.

(e) An IARP is issued to the person by the country of which the person is a citizen. The person must not:

(5) Be a resident alien or citizen of the United States, regardless of any other citizenship also held;

(6) Hold an FCC or ARA-issued amateur operator license nor reciprocal permit for alien amateur licensee;

(7) Be a prior amateur service licensee whose FCC or ARA-issued license was revoked, suspended for less than the balance of the license term and the suspension is still in effect, suspended for the balance of the license term and relicensing has not taken place, or surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings; or

(8) Be the subject of a cease and desist order that relates to amateur service operation and which is still in effect.

§ 97.7 Control operator required.

When transmitting, each amateur station must have a control operator. The control operator must be a person:

(a) For whom an amateur operator/primary station license grant appears on the ALRS licensee database, or

(b) Who is authorized for alien reciprocal operation by § 97.107 of this part.

§ 97.9 Operator license grant.

(a) The classes of amateur operator license grants are: Basic and Full. The person named in the operator license grant is authorized to be the control operator of an amateur station with the privileges authorized to the operator class specified on the license grant.

(b) The person named in an operator license grant who has properly submitted to the administering VEs an appropriate document requesting examination for an operator license grant of a higher class, and who holds a CSCE indicating that the person has completed the necessary examinations within the previous 365 days, is authorized to exercise the rights and privileges of the higher operator class until final disposition of the application or until 365 days following the passing of the examination, whichever comes first.

§ 97.11 Stations aboard ships or aircraft.

(a) The installation and operation of an amateur station on a ship or aircraft must be approved by the master of the ship or pilot in command of the aircraft.

(b) The station must be separate from and independent of all other radio apparatus installed on the ship or aircraft, except a common antenna may be shared with a

voluntary ship radio installation. The station's transmissions must not cause interference to any other apparatus installed on the ship or aircraft.

(c) The station must not constitute a hazard to the safety of life or property. For a station aboard an aircraft, the apparatus shall not be operated while the aircraft is operating under Instrument Flight Rules, as defined by the FAA, unless the station has been found to comply with all applicable FAA Rules.

§ 97.13 Restrictions on station location.

(a) Before placing an amateur station on land of environmental importance or that is significant in American history, architecture or culture, the licensee may be required to take certain actions prescribed by §§ 1.1305-1.1319 of this chapter.

(b) A station within 1600 m (1 mile) of an FCC monitoring facility must protect that facility from harmful interference. Failure to do so could result in imposition of operating restrictions upon the amateur station pursuant to § 97.121. Geographical coordinates of the facilities that require protection are listed in § 0.121(c) of this chapter.

(c) Before causing or allowing an amateur station to transmit from any place where the operation of the station could cause human exposure to RF electromagnetic field levels in excess of those allowed under § 1.1310 of this chapter, the licensee is required to take certain actions.

(1) The licensee shall ensure compliance with the Commission's radio frequency exposure requirements in §§ 1.1307(b), 2.1091, and 2.1093 of this chapter, where applicable. In lieu of evaluation with the general population/uncontrolled exposure limits, amateur licensees may evaluate their operation with respect to members of his or her immediate household using the occupational/controlled exposure limits in § 1.1310, provided appropriate training and information has been accessed by the amateur licensee and members of his/her household. RF exposure of other nearby persons who are not members of the amateur licensee's household must be evaluated with respect to the general population/uncontrolled exposure limits. Appropriate methodologies and guidance for evaluating amateur radio service operation is described in the Office of Engineering and Technology (OET) Bulletin 65, Supplement B.

(2) If the routine environmental evaluation indicates that the RF electromagnetic fields could exceed the limits contained in § 1.1310 of this chapter in accessible areas, the licensee must take action to prevent human exposure to such RF electromagnetic fields. Further information on evaluating compliance with these limits can be found in the FCC's OET Bulletin Number 65, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.”

(3) The licensee shall be deemed in compliance with § 1.1310 of this chapter when the power of the licensee’s station does not exceed the limits given in the following table:

Wavelength band	Power[1] in watts
LF – 2200 m	1500
MF – all bands	500
HF – all bands	100
VHF – all bands	50
UHF – all bands	50
SHF – all bands	250
EHF – all bands	250
Repeater stations (all bands)	500 W ERP

§ 97.15 Station antenna structures.

(a) Owners of certain antenna structures more than 60.96 meters (200 feet) above ground level at the site or located near or at a public use airport must notify the Federal Aviation Administration and register with the Commission as required by part 17 of this chapter.

(b) Except as otherwise provided herein, a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. (State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose. See PRB-1, 101 FCC 2d 952 (1985) for details.)

(c) Antennas used to transmit in the 2200 m and 630 m bands must not exceed 60 meters in height above ground level.

§ 97.17 Application for new license grant.

(a) Any qualified person is eligible to apply for a new operator/primary station, club station or military recreation station license grant.

(b) Each application for a new amateur service license grant must be filed with the ARA as follows:

[1] Power = PEP input to an antenna except, for repeater stations only, power exclusion is based on ERP (effective radiated power).

(1) Each candidate for an amateur radio operator license which requires the applicant to pass one or more examination elements must present the administering VEs with all information required by the rules prior to the examination. The VEs may collect all necessary information in any manner of their choosing, including creating their own forms.

(2) For a new club or military recreation station license grant, each applicant must present all information required by the rules to the ARA. The ARA may collect the information required by these rules in any manner of their choosing, including creating their own forms. The ARA must retain the applicants information for at least 15 months and make it available to the FCC upon request.

(c) No person shall obtain or attempt to obtain, or assist another person to obtain or attempt to obtain, an amateur service license grant by fraudulent means.

(d) One unique call sign will be shown on the license grant of each new primary, club and military recreation station. The call sign will be selected by the sequential call sign system. Effective February 14, 2011, no club station license grants will be issued to a licensee who is shown as the license trustee on an existing club station license grant.

§ 97.23 Mailing and email addresses.

All grantees of an amateur radio license shall record and maintain their correct name, mailing address, and email address in the ARLS. The email address must be an address where the grantee can receive electronic correspondence. Revocation of the station license or suspension of the operator license may result when correspondence from the FCC or ARA is returned as undeliverable because the grantee failed to provide the correct email address.

§ 97.25 License term.

An amateur service license is normally granted for a 10-year term.

§ 97.27 FCC modification of station license grant.

(a) The FCC may modify a station license grant, either for a limited time or for the duration of the term thereof, if it determines:

(1) That such action will promote the public interest, convenience, and necessity; or

(2) That such action will promote fuller compliance with the provisions of the Communications Act of 1934, as amended, or of any treaty ratified by the United States.

(b) When the FCC makes such a determination, it will issue an order of modification. The order will not become final until the licensee is notified in writing of the

proposed action and the grounds and reasons therefor. The licensee will be given reasonable opportunity of no less than 30 days to protest the modification; except that, where safety of life or property is involved, a shorter period of notice may be provided. Any protest by a licensee of an FCC order of modification will be handled in accordance with the provisions of 47 U.S.C. 316.

§ 97.29 Cancellation on account of the licensee's death.

(a) A person may request cancellation of an operator/primary station license grant on account of the licensee's death by submitting to the ARA a signed request that includes a death certificate, obituary, or Social Security Death Index data that shows the person named in the operator/primary station license grant has died. Such a request may be submitted as a pleading associated with the deceased licensee's license. See § 1.45 of this chapter. In addition, the Commission may cancel an operator/primary station license grant if it becomes aware of the grantee's death through other means. No action will be taken during the last thirty days of the post-expiration grace period (see § 97.605(e)) on a request to cancel a license due to the licensee's death.

(b) A license that is canceled due to the licensee's death is canceled as of the date of the licensee's death.

Subpart B — Station Operation Standards

§ 97.101 General standards.

(a) In all respects not specifically covered by FCC Rules each amateur station must be operated in accordance with good engineering and good amateur practice.

(b) Each station licensee and each control operator must cooperate in selecting transmitting channels and in making the most effective use of the amateur service frequencies. No frequency will be assigned for the exclusive use of any station.

(c) At all times and on all frequencies, each control operator must give priority to stations providing emergency communications, except to stations transmitting communications for training drills and tests in RACES.

(d) No amateur operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal.

§ 97.103 Station licensee responsibilities.

(a) The station licensee is responsible for the proper operation of the station in accordance with the FCC Rules. When the control operator is a different amateur operator than the station licensee, both persons are equally responsible for proper operation of the station.

(b) The station licensee must designate the station control operator. The FCC will presume that the station licensee is also the control operator, unless documentation to the contrary is in the station records.

(c) The station licensee must make the station and the station records available for inspection upon request by an FCC representative.

§ 97.105 Control operator duties.

(a) The control operator must ensure the immediate proper operation of the station, regardless of the type of control.

(b) A station may only be operated in the manner and to the extent permitted by the privileges authorized for the class of operator license held by the control operator.

§ 97.107 Reciprocal operating authority.

A non-citizen of the United States (“alien”) holding an amateur service authorization granted by the alien's government is authorized to be the control operator of an amateur station located at places where the amateur service is regulated by the FCC, provided there is in effect a multilateral or bilateral reciprocal operating arrangement, to which the United States and the alien's government are parties, for amateur service operation on a reciprocal basis. The FCC will issue public announcements listing the countries with which the United States has such an arrangement. No citizen of the United States or person holding an FCC amateur operator/primary station license grant is eligible for the reciprocal operating authority granted by this section. The privileges granted to a control operator under this authorization are:

(a) For an amateur service license granted by the Government of Canada:

(1) The terms of the Convention Between the United States and Canada (TIAS No. 2508) Relating to the Operation by Citizens of Either Country of Certain Radio Equipment or Stations in the Other Country;

(2) The operating terms and conditions of the amateur service license issued by the Government of Canada; and

(3) The applicable rules of this part, but not to exceed the control operator privileges of an FCC-granted Full Class operator license.

(b) For an amateur service license granted by any country, other than Canada, with which the United States has a multilateral or bilateral agreement:

(1) The terms of the agreement between the alien's government and the United States;

(2) The operating terms and conditions of the amateur service license granted by the alien's government;

(3) The applicable rules of this part, but not to exceed the control operator privileges of an FCC-granted Full Class operator license; and

(c) At any time the FCC may, in its discretion, modify, suspend or cancel the reciprocal operating authority granted to any person by this section.

§ 97.109 Station control.

(a) Each amateur station must have at least one control point.

(b) When a station is being locally controlled, the control operator must be at the control point. Any station may be locally controlled.

(c) When a station is being remotely controlled, the control operator must be at the control point. Any station may be remotely controlled.

(d) When a station is being automatically controlled, the control operator need not be at the control point. Only stations specifically designated elsewhere in this part may be automatically controlled. Automatic control must cease upon notification by a Regional Director that the station is transmitting improperly or causing harmful interference to other stations. Automatic control must not be resumed without prior approval of the Regional Director.

(e) When a station is being remotely or automatically controlled, the control operator must hold a Full Class operator license.

§ 97.111 Authorized transmissions.

(a) An amateur station may transmit the following types of two-way communications:

(1) Transmissions necessary to exchange messages with other stations in the amateur service, except those in any country whose administration has notified the ITU that it objects to such communications. The FCC will issue public notices of current arrangements for international communications.

(2) Transmissions necessary to meet essential communication needs and to facilitate relief actions.

(3) Transmissions necessary to exchange messages with a station in another FCC-regulated service while providing emergency communications;

(4) Transmissions necessary to exchange messages with a United States government station, necessary to providing communications in RACES; and

(5) Transmissions necessary to exchange messages with a station in a service not regulated by the FCC, but authorized by the FCC to communicate with amateur stations. An amateur station may exchange messages with a participating United States military station during an Armed Forces Day Communications Test. An amateur station may exchange messages with a United States government station when the government station solicits such

messages in an emergency, for disaster relief, or during a brief exercises to prepare for emergency or disaster relief.

(b) In addition to one-way transmissions specifically authorized elsewhere in this part, an amateur station may transmit the following types of one-way communications:

(1) Brief transmissions necessary to make adjustments to the station;

(2) Brief transmissions necessary to establishing two-way communications with other stations;

(3) Telecommand;

(4) Transmissions necessary to providing emergency communications;

(5) Transmissions necessary to assisting persons learning, or improving proficiency in, the international Morse code; and

(6) Transmissions necessary to disseminate information bulletins.

(7) Transmissions of telemetry.

§ 97.113 Prohibited transmissions.

(a) No amateur station shall transmit:

(1) Communications specifically prohibited elsewhere in this part;

(2) Communications for hire or for material compensation, direct or indirect, paid or promised, except as otherwise provided in these rules;

(3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer, with the following exceptions:

(i) A station licensee or station control operator may participate on behalf of an employer in an emergency preparedness or disaster readiness test or drill, limited to the duration and scope of such test or drill, and operational testing immediately prior to such test or drill. Tests or drills that are not government-sponsored are limited to a total time of one hour per week; except that no more than twice in any calendar year, they may be conducted for a period not to exceed 72 hours.

(ii) An amateur operator may notify other amateur operators of the availability for sale or trade of apparatus normally used in an amateur station, provided that such activity is not conducted on a regular basis.

(iii) A control operator may accept compensation as an incident of a teaching position during periods of time when an amateur station is used by that teacher as a part of classroom instruction at an educational institution.

(iv) The control operator of a club station may accept compensation for the periods of time when the station is transmitting telegraphy practice or information bulletins, provided that the station transmits such telegraphy practice and bulletins for at least 40 hours per week; schedules operations on at least six amateur service MF and HF bands using reasonable measures to maximize coverage; where the schedule of normal operating times and frequencies is published at least 30 days in advance of the actual transmissions; and where the control operator does not accept any direct or indirect compensation for any other service as a control operator.

(4) Music using a phone emission except as specifically provided elsewhere in this section; communications intended to facilitate a criminal act; obscene or indecent words or language; or false or deceptive messages, signals or identification.

(5) Communications, on a regular basis, which could reasonably be furnished alternatively through other radio services.

(6) Messages encoded for the purpose of obscuring their meaning, except:

(i) As specified in § 97.211(b); and

(ii) When transmitting on the 70 cm and shorter wavelength bands, if

(A) The message is not intended for communication with any station within the jurisdiction of any foreign government;

(B) Station identification is not obscured; and

(C) Information sufficient to decode the message is registered with the ARA.

(b) An amateur station shall not engage in any form of broadcasting, nor may an amateur station transmit one-way communications except as specifically provided in these rules; nor shall an amateur station engage in any activity related to program production or news gathering for broadcasting purposes, except that communications directly related to the immediate safety of human life or the protection of property may be provided by amateur stations to broadcasters for dissemination to the public where no other means of communication is reasonably available before or at the time of the event.

(c) No station shall retransmit programs or signals emanating from any type of radio station other than an amateur station, except propagation and weather forecast information intended for use by the general public and originated from United States Government stations, and communications, including incidental music, originating on United States Government frequencies between a manned spacecraft and its associated Earth stations. Prior approval for manned spacecraft communications retransmissions must be obtained from the National Aeronautics and Space Administration. Such retransmissions must be for the exclusive use of amateur radio operators. Propagation, weather forecasts, and

manned spacecraft communications retransmissions may not be conducted on a regular basis, but only occasionally, as an incident of normal amateur radio communications.

(d) No amateur station, except an auxiliary, repeater, or space station, may automatically retransmit the radio signals of other amateur station.

§ 97.115 Third party communications.

(a) An amateur station may transmit messages for a third party to:

(1) Any station within the jurisdiction of the United States.

(2) Any station within the jurisdiction of any foreign government when transmitting emergency or disaster relief communications and any station within the jurisdiction of any foreign government whose administration has made arrangements with the United States to allow amateur stations to be used for transmitting international communications on behalf of third parties. No station shall transmit messages for a third party to any station within the jurisdiction of any foreign government whose administration has not made such an arrangement. This prohibition does not apply to a message for any third party who is eligible to be a control operator of the station.

(b) The third party may participate in stating the message where:

(1) The control operator is present at the control point and is continuously monitoring and supervising the third party's participation; and

(2) The third party is not a prior amateur service licensee whose license was revoked or not renewed after hearing and re-licensing has not taken place; suspended for less than the balance of the license term and the suspension is still in effect; suspended for the balance of the license term and re-licensing has not taken place; or surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings. The third party may not be the subject of a cease and desist order which relates to amateur service operation and which is still in effect.

(c) No station may transmit third party communications while being automatically controlled except a station transmitting a RTTY or data emission.

(d) At the end of an exchange of international third party communications, the station must also transmit in the station identification procedure the call sign of the station with which a third party message was exchanged.

§ 97.117 International communications.

Transmissions to a different country, where permitted, shall be limited to communications incidental to the purposes of the amateur service and to remarks of a personal character.

§ 97.119 Station identification.

(a) Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every 10 minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station.

(b) The call sign must be transmitted with an emission authorized for the transmitting channel in one of the following ways:

(1) By a CW emission. When keyed by an automatic device used only for identification, the speed must not exceed 20 words per minute;

(2) By a phone emission in the English language. Use of a phonetic alphabet as an aid for correct station identification is encouraged;

(3) By a RTTY emission using a specified digital code when all or part of the communications are transmitted by a RTTY or data emission;

(4) By an image emission conforming to the applicable transmission standards, either color or monochrome, of § 73.682(a) of the FCC Rules when all or part of the communications are transmitted in the same image emission.

(c) One or more indicators may be included with the call sign. Each indicator must be separated from the call sign by the slant mark (/) or by any suitable word that denotes the slant mark. If an indicator is self-assigned, it must be included before, after, or both before and after, the call sign. No self-assigned indicator may conflict with any other indicator specified by the FCC Rules or with any prefix assigned to another country.

(d) When transmitting in conjunction with an event of special significance, a station may substitute for its assigned call sign a special event call sign as shown for that station for that period of time on the common data base coordinated, maintained and disseminated by the special event call sign data base coordinators. Additionally, the station must transmit its assigned call sign at least once per hour during such transmissions.

(e) When the operator license class held by the control operator exceeds that of the station licensee, an indicator consisting of the call sign assigned to the control operator's station must be included after the call sign.

(f) When the control operator is a person who is exercising the rights and privileges authorized by § 97.9(b) of this part and who has requested a license modification from Basic Class to Full Class, the indicator AF must be included after the call sign.

(g) When the station is transmitting under the authority of § 97.107 of this part, an indicator consisting of the appropriate letter-numeral designating the station

location must be included before the call sign that was issued to the station by the country granting the license. For an amateur service license granted by the Government of Canada, however, the indicator must be included after the call sign. At least once during each intercommunication, the identification announcement must include the geographical location as nearly as possible by city and state, commonwealth or possession.

§ 97.121 Restricted operation.

(a) If the operation of an amateur station causes general interference to the reception of transmissions from stations operating in the domestic broadcast service when receivers of good engineering design, including adequate selectivity characteristics, are used to receive such transmissions, and this fact is made known to the amateur station licensee, the amateur station shall not be operated during the hours from 8 p.m. to 10:30 p.m., local time, and on Sunday for the additional period from 10:30 a.m. until 1 p.m., local time, upon the frequency or frequencies used when the interference is created.

(b) In general, such steps as may be necessary to minimize interference to stations operating in other services may be required after investigation by the FCC.

Subpart C — Special Operations

§ 97.201 Auxiliary station.

(a) Any amateur station licensed to a holder of a Full Class operator license may be an auxiliary station or the control operator of an auxiliary station.

(b) An auxiliary station may transmit only on the 2 m and shorter wavelength bands, except the 144.0-144.5 MHz, 145.8-146.0 MHz, 219-220 MHz, 222.00-222.15 MHz, 431-433 MHz, and 435-438 MHz segments.

(c) Where an auxiliary station causes harmful interference to another auxiliary station, the licensees are equally and fully responsible for resolving the interference unless one station's operation is recommended by a frequency coordinator and the other station's is not. In that case, the licensee of the non-coordinated auxiliary station has primary responsibility to resolve the interference.

(d) An auxiliary station may be automatically controlled.

(e) An auxiliary station may transmit one-way communications.

§ 97.203 Beacon station.

(a) Any amateur station licensed to a holder of a Full Class operator license may be a beacon or the control operator of a beacon.

(b) A beacon must not concurrently transmit on more than 1 channel in the same amateur service frequency band, from the same station location.

(c) The transmitter power of a beacon must not exceed 100 W.

(d) A beacon may be automatically controlled while it is transmitting on the 28.20-28.30 MHz, 50.06-50.08 MHz, 144.275-144.300 MHz, 222.05-222.06 MHz or 432.300-432.400 MHz segments, or on the 33 cm and shorter wavelength bands.

(e) Before establishing an automatically controlled beacon in the National Radio Quiet Zone or before changing the transmitting frequency, transmitter power, antenna height or directivity, the station licensee must give written notification thereof to the Interference Office, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, WV 24944.

(1) The notification must include the geographical coordinates of the antenna, antenna ground elevation above mean sea level (AMSL), antenna center of radiation above ground level (AGL), antenna directivity, proposed frequency, type of emission, and transmitter power.

(2) If an objection to the proposed operation is received by the FCC from the National Radio Astronomy Observatory at Green Bank, Pocahontas County, WV, for itself or on behalf of the Naval Research Laboratory at Sugar Grove, Pendleton County, WV, within 20 days from the date of notification, the FCC will consider all aspects of the problem and take whatever action is deemed appropriate.

(f) A beacon must cease transmissions upon notification by a Regional Director that the station is operating improperly or causing undue interference to other operations. The beacon may not resume transmitting without prior approval of the Regional Director.

(g) A beacon may transmit one-way communications.

§ 97.205 Repeater station.

(a) Any amateur station licensed to a holder of a Full Class operator license may be a repeater or the control operator of a repeater.

(b) A repeater may receive and retransmit only on the 10 m and shorter wavelength frequency bands except the 28.0-29.5 MHz, 50.0-51.0 MHz, 144.0-144.5 MHz, 145.5-146.0 MHz, 222.00-222.15 MHz, 431.0-433.0 Mhz, and 435.0-438.0 Mhz segments.

(c) Where the transmissions of a repeater cause harmful interference to another repeater, the two station licensees are equally and fully responsible for resolving the interference unless the operation of one station is recommended by a frequency coordinator and the operation of the other station is not. In that case, the licensee of the non-coordinated repeater has primary responsibility to resolve the interference.

(d) A repeater may be automatically controlled.

(e) Ancillary functions of a repeater that are available to users on the input channel are not considered remotely controlled functions of the station. Limiting the use of a repeater to only certain user stations is permissible.

(f) The control operator of a repeater that retransmits inadvertently communications that violate the rules in this part is not accountable for the violative communications.

§ 97.207 Space station.

(a) Any amateur station may be a space station. A holder of a Full Class operator license may be the control operator of a space station.

(b) A space station must be capable of effecting a cessation of transmissions by telecommand whenever such cessation is ordered by the FCC.

(c) The following frequency bands and segments are authorized to space stations:

(1) The 17 m, 15 m, 12 m, and 10 m bands, 6 mm, 4 mm, 2 mm and 1 mm bands; and

(2) The 7.0-7.1 MHz, 14.00-14.25 MHz, 144-146 MHz, 435-438 MHz, 2400-2450 MHz, 5.83-5.85 GHz, 10.45-10.50 GHz, and 24.00-24.05 GHz segments.

(d) A space station may automatically retransmit the radio signals of Earth stations and other space stations.

(e) A space station may transmit one-way communications.

(f) Space telemetry transmissions may consist of specially coded messages intended to facilitate communications or related to the function of the spacecraft.

(g) The license grantee of each space station must make the following written notifications to the Space Bureau, FCC, Washington, DC 20554.

(1) A pre-space notification within 30 days after the date of launch vehicle determination, but no later than 90 days before integration of the space station into the launch vehicle. The notification must be in accordance with the provisions of Articles 9 and 11 of the International Telecommunication Union (ITU) Radio Regulations and must specify the information required by Appendix 4 and Resolution No. 642 of the ITU Radio Regulations. The notification must also include a description of the design and operational strategies that the space station will use to mitigate orbital debris, including the following information:

(i) A statement that the space station operator has assessed and limited the amount of debris released in a planned manner during normal operations. Where applicable, this statement must include an orbital debris mitigation disclosure for any separate deployment devices, distinct from the space station launch vehicle, that may become a source of orbital debris;

(ii) A statement indicating whether the space station operator has assessed and limited the probability that the space station(s) will become a source of debris by collision with small debris or meteoroids that would cause loss of control and prevent disposal. The statement must indicate whether this probability for an individual space station is 0.01 (1 in 100) or less, as calculated using the NASA Debris Assessment Software or a higher fidelity assessment tool;

(iii) A statement that the space station operator has assessed and limited the probability, during and after completion of mission operations, of accidental explosions or of release of liquids that will persist in droplet form. This statement must include a demonstration that debris generation will not result from the conversion of energy sources on board the spacecraft into energy that fragments the spacecraft. Energy sources include chemical, pressure, and kinetic energy. This demonstration should address whether stored energy will be removed at the spacecraft's end of life, by depleting residual fuel and leaving all fuel line valves open, venting any pressurized system, leaving all batteries in a permanent discharge state, and removing any remaining source of stored energy, or through other equivalent procedures specifically disclosed in the application;

(iv) A statement that the space station operator has assessed and limited the probability of the space station(s) becoming a source of debris by collisions with large debris or other operational space stations.

(A) Where the application is for an NGSO space station or system, the following information must also be included:

(1) A demonstration that the space station operator has assessed and limited the probability of collision between any space station of the system and other large objects (10 cm or larger in diameter) during the total orbital lifetime of the space station, including any de-orbit phases, to less than 0.001 (1 in 1,000). The probability shall be calculated using the NASA Debris Assessment Software or a higher fidelity assessment tool. The collision risk may be assumed zero for a space station during any period in which the space station will be maneuvered effectively to avoid colliding with large objects.

(2) The statement must identify characteristics of the space station(s)' orbits that may present a collision risk, including any planned and/or operational space stations in those orbits, and indicate what steps, if any, have been taken to coordinate with the other spacecraft or system, or what other measures the operator plans to use to avoid collision.

(3) If at any time during the space station(s)' mission or de-orbit phase the space station(s) will transit through the orbits used by any inhabitable spacecraft, including the International Space Station, the statement must describe the design and operational

strategies, if any, that will be used to minimize the risk of collision and avoid posing any operational constraints to the inhabitable spacecraft.

(4) The statement must disclose the accuracy, if any, with which orbital parameters will be maintained, including apogee, perigee, inclination, and the right ascension of the ascending node(s). In the event that a system is not be maintained to specific orbital tolerances, e.g., its propulsion system will not be used for orbital maintenance, that fact should be included in the debris mitigation disclosure. Such systems must also indicate the anticipated evolution over time of the orbit of the proposed satellite or satellites. All systems must describe the extent of satellite maneuverability, whether or not the space station design includes a propulsion system.

(5) The space station operator must certify that upon receipt of a space situational awareness conjunction warning, the operator will review and take all possible steps to assess the collision risk, and will mitigate the collision risk if necessary. As appropriate, steps to assess and mitigate the collision risk should include, but are not limited to: Contacting the operator of any active spacecraft involved in such a warning; sharing ephemeris data and other appropriate operational information with any such operator; and modifying space station attitude and/or operations.

(B) Where a space station requests the assignment of a geostationary orbit location, it must assess whether there are any known satellites located at, or reasonably expected to be located at, the requested orbital location, or assigned in the vicinity of that location, such that the station keeping volumes of the respective satellites might overlap or touch. If so, the statement must include a statement as to the identities of those parties and the measures that will be taken to prevent collisions.

(v) A statement addressing the trackability of the space station(s). Space station(s) operating in low-Earth orbit will be presumed trackable if each individual space station is 10 cm or larger in its smallest dimension, exclusive of deployable components. Where the application is for an NGSO space station or system, the statement shall also disclose the following:

(A) How the operator plans to identify the space station(s) following deployment and whether space station tracking will be active or passive;

(B) Whether, prior to deployment, the space station(s) will be registered with the 18th Space Control Squadron or successor entity; and

(C) The extent to which the space station operator plans to share information regarding initial deployment, ephemeris, and/or planned

maneuvers with the 18th Space Control Squadron or successor entity, other entities that engage in space situational awareness or space traffic management functions, and/or other operators.

(vi) A statement disclosing planned proximity operations, if any, and addressing debris generation that will or may result from the proposed operations, including any planned release of debris, the risk of accidental explosions, the risk of accidental collision, and measures taken to mitigate those risks.

(vii) A statement detailing the disposal plans for the space station, including the quantity of fuel—if any—that will be reserved for disposal maneuvers. In addition, the following specific provisions apply:

(A) For geostationary orbit space stations, the statement must disclose the altitude selected for a disposal orbit and the calculations that are used in deriving the disposal altitude.

(B) For space stations terminating operations in an orbit in or passing through the low-Earth orbit region below 2,000 km altitude, the statement must disclose whether the spacecraft will be disposed of either through atmospheric re-entry, specifying if direct retrieval of the spacecraft will be used. The statement must also disclose the expected time in orbit for the space station following the completion of the mission.

(C) For space stations not covered by either paragraph (g)(1)(vii)(A) or (B) of this section, the statement must indicate whether disposal will involve use of a storage orbit or long-term atmospheric re-entry and rationale for the selected disposal plan.

(D) For all NGSO space stations under paragraph (g)(1)(vii)(B) or (C) of this section, the following additional specific provisions apply:

(1) The statement must include a demonstration that the probability of success of the chosen disposal method will be 0.9 or greater for any individual space station. For space station systems consisting of multiple space stations, the demonstration should include additional information regarding efforts to achieve a higher probability of success, with a goal, for large systems, of a probability of success for any individual space station of 0.99 or better. For space stations under paragraph (g)(1)(vii)(B) of this section that will be terminating operations in or passing through the low-Earth orbit region below 2000 km altitude, successful disposal, for the purposes of this paragraph (g)(1)(vii)(D)(1), is defined as atmospheric re-entry of the spacecraft as soon as practicable, but no later than five years following completion of the mission. For space stations under paragraph (g)(1)(vii)(C) of this section, successful disposal will be assessed on a case-by-case basis.

(2) If planned disposal is by atmospheric re-entry, the statement must also include:

(i) A disclosure indicating whether the atmospheric re-entry will be an uncontrolled re-entry or a controlled targeted reentry.

(ii) An assessment as to whether portions of any individual spacecraft will survive atmospheric re-entry and impact the surface of the Earth with a kinetic energy in excess of 15 joules, and demonstration that the calculated casualty risk for an individual spacecraft using the NASA Debris Assessment Software or a higher fidelity assessment tool is less than 0.0001 (1 in 10,000).

(viii) If any material item described in this notification changes before launch, a replacement pre-space notification shall be filed with the Space Bureau no later than 90 days before integration of the space station into the launch vehicle.

(2) An in-space station notification is required no later than 7 days following initiation of space station transmissions. This notification must update the information contained in the pre-space notification.

(3) A post-space station notification is required no later than 3 months after termination of the space station transmissions. When termination of transmissions is ordered by the FCC, the notification is required no later than 24 hours after termination of transmissions.

§ 97.209 Earth station.

(a) Any amateur station may be an Earth station. A holder of a Full Class operator license may be the control operator of an Earth station.

(b) The following frequency bands and segments are authorized to Earth stations:

(1) The 17 m, 15 m, 12 m, and 10 m bands, 6 mm, 4 mm, 2 mm and 1 mm bands; and

(2) The 7.0-7.1 MHz, 14.00-14.25 MHz, 144-146 MHz, 435-438 MHz, 1260-1270 MHz and 2400-2450 MHz, 5.65-5.67 GHz, 10.45-10.50 GHz and 24.00-24.05 GHz segments.

§ 97.211 Space telecommand station.

(a) Any amateur station designated by the licensee of a space station is eligible to transmit as a telecommand station for that space station, subject to the privileges of the class of operator license held by the control operator.

(b) A telecommand station may transmit special codes intended to obscure the meaning of telecommand messages to the station in space operation.

(c) The following frequency bands and segments are authorized to telecommand stations:

(1) The 17 m, 15 m, 12 m and 10 m bands, 6 mm, 4 mm, 2 mm and 1 mm bands; and

(2) The 7.0-7.1 MHz, 14.00-14.25 MHz, 144-146 MHz, 435-438 MHz, 1260-1270 MHz and 2400-2450 MHz, 5.65-5.67 GHz, 10.45-10.50 GHz and 24.00-24.05 GHz segments.

(d) A telecommand station may transmit one-way communications.

§ 97.213 Telecommand of an amateur station.

An amateur station on or within 50 km of the Earth's surface may be under telecommand where:

(a) There is a radio or wireline control link between the control point and the station sufficient for the control operator to perform his/her duties. If radio, the control link must use an auxiliary station. A control link using a fiber optic cable or another telecommunication service is considered wireline.

(b) Provisions are incorporated to limit transmission by the station to a period of no more than 3 minutes in the event of malfunction in the control link.

(c) The station is protected against making, willfully or negligently, unauthorized transmissions.

(d) A photocopy of the station license and a label with the name, address, and telephone number of the station licensee and at least one designated control operator is posted in a conspicuous place at the station location.

§ 97.215 Telecommand of model craft.

An amateur station transmitting signals to control a model craft may be operated as follows:

(a) The station identification procedure is not required for transmissions directed only to the model craft, provided that a label indicating the station call sign and the station licensee's name and address is affixed to the station transmitter.

(b) The control signals are not considered codes or ciphers intended to obscure the meaning of the communication.

(c) The transmitter power must not exceed 1 W.

§ 97.217 Telemetry.

Telemetry transmitted by an amateur station on or within 50 km of the Earth's surface is not considered to be codes or ciphers intended to obscure the meaning of communications.

§ 97.219 Message forwarding system.

(a) Any amateur station may participate in a message forwarding system, subject to the privileges of the class of operator license held.

(b) For stations participating in a message forwarding system, the control operator of the station originating a message is primarily accountable for any violation of the rules in this part contained in the message.

(c) Except as noted in (d) of this section, for stations participating in a message forwarding system, the control operators of forwarding stations that retransmit inadvertently communications that violate the rules in this part are not accountable for the violative communications. They are, however, responsible for discontinuing such communications once they become aware of their presence.

(d) For stations participating in a message forwarding system, the control operator of the first forwarding station must:

(1) Authenticate the identity of the station from which it accepts communications on behalf of the system; or

(2) Accept accountability for any violation of the rules in this part contained in messages it retransmits to the system.

§ 97.221 Automatically controlled digital station.

(a) This rule section does not apply to an auxiliary station, a beacon station, a repeater station, an earth station, a space station, or a space telecommand station.

(b) A station may be automatically controlled while transmitting a RTTY or data emission on the 80 m or shorter wavelength bands.

(c) Except for channels specified in § 97.303(h), a station may be automatically controlled while transmitting a RTTY or data emission on any other frequency authorized for such emission types provided that:

(1) The station is responding to interrogation by a station under local or remote control; and

(2) No transmission from the automatically controlled station occupies a bandwidth of more than 500 Hz.

(d) A station that is automatically controlled while transmitting a RTTY or data emission must transmit its assigned call sign on its transmitting channel at the end of each communication by a phone emission or a CW emission at a speed not exceeding 20 words per minute.

(e) The control operator of a station that is automatically controlled while transmitting a RTTY or data emission shall take reasonable steps to ensure that automatic transmissions do not cause harmful interference to other stations.

Subpart D — Technical Standards

§ 97.301 Authorized frequency bands.

The following transmitting frequency bands, subject to constraints under rules authorized in § 97.609, are available to an amateur station located within 50 km of the Earth's surface, within the specified ITU Region, and outside any area where the amateur service is regulated by any authority other than the FCC.

Wavelength band	ITU Region 1	ITU Region 2	ITU Region 3	Sharing requirements see § 97.303 (paragraph)
LF	**kHz**	**kHz**	**kHz**	
2200 m	135.7-137.8	135.7-137.8	135.7-137.8	(a), (g).
MF	**kHz**	**kHz**	**kHz**	
160 m	1810-1850	1800-2000	1800-2000	(a).
630 m	472-479	472-479	472-479	(g).
HF	**MHz**	**MHz**	**MHz**	
80 m	3.500-3.800	3.500-4.000	3.500-3.900	(a)
60 m	5.3515-5.3665	5.3515-5.3665	5.3515-5.3665	(h)(2)
Do		See § 97.303(h)(1)		(h)(1), (h)(2)
40 m	7.000-7.200	7.000-7.300	7.000-7.300	(i)
30 m	10.100-10.150	10.100-10.150	10.100-10.150	(j)
20 m	14.000-14.350	14.000-14.350	14.000-14.350	
17 m	18.068-18.168	18.068-18.168	18.068-18.168	
15 m	21.000-21.450	21.000-21.450	21.000-21.450	
12 m	24.890-24.990	24.890-24.990	24.890-24.990	
10 m	28.000-29.700	28.000-29.700	28.000-29.700	
VHF	**MHz**	**MHz**	**MHz**	
6 m		50-54	50-54	(a).
2 m	144-146	144-148	144-148	(a), (k).
1.25 m		219-220		(l).
Do		222-225		(a).
UHF	**MHz**	**MHz**	**MHz**	
70 cm	430-440	420-450	430-440	(a), (b), (m).
33 cm		902-928		(a), (b), (e), (n).
23 cm	1240-1300	1240-1300	1240-1300	(b), (d), (o).
13 cm	2300-2310	2300-2310	2300-2310	(d), (p).

Do	2390-2450	2390-2450	2390-2450	(d), (e), (p).
SHF	**GHz**	**GHz**	**GHz**	
5 cm	5.650-5.850	5.650-5.925	5.650-5.850	(a), (b), (e), (q).
3 cm	10.0-10.5	10.0-10.5	10.0-10.5	(a), (b), (k).
1.2 cm	24.00-24.25	24.00-24.25	24.00-24.25	(b), (d), (e).
EHF	**GHz**	**GHz**	**GHz**	
6 mm	47.0-47.2	47.0-47.2	47.0-47.2	
4 mm	76-81	76-81	76-81	(c), (f), **Error! Reference source not found.**.
2.5 mm	122.25-123.00	122.25-123.00	122.25-123.00	(e), (r).
2 mm	134-141	134-141	134-141	(c), (f).
1 mm	241-250	241-250	241-250	(c), (e), (f).
	Above 275	Above 275	Above 275	(f).

§ 97.303 Frequency sharing requirements.

The following paragraphs summarize the frequency sharing requirements that apply to amateur stations transmitting in the frequency bands specified in § 97.301 of this part. Each frequency band allocated to the amateur service is designated as either a secondary service or a primary service. A station in a secondary service must not cause harmful interference to, and must accept interference from, stations in a primary service.

(a) Where, in adjacent ITU Regions or sub-Regions, a band of frequencies is allocated to different services of the same category (i.e., primary or secondary services), the basic principle is the equality of right to operate. Accordingly, stations of each service in one Region or sub-Region must operate so as not to cause harmful interference to any service of the same or higher category in the other Regions or sub-Regions.

(b) Amateur stations transmitting in the 70 cm band, the 33 cm band, the 23 cm band, the 5 cm band, the 3 cm band, or the 24.05-24.25 GHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the United States Government in the radiolocation service.

(c) Amateur stations transmitting in the 76-81 GHz segment, the 136-141 GHz segment, or the 241-248 GHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the United States Government, the FCC, or other nations in the radiolocation service.

(d) Amateur stations transmitting in the 430-450 MHz segment, the 23 cm band, the 3.3-3.4 GHz segment, the 5.65-5.85 GHz segment, the 13 cm band, or the 24.05-24.25 GHz segment, must not cause harmful interference to, and must accept interference from, stations authorized by other nations in the radiolocation service.

(e) Amateur stations receiving in the 33 cm band, the 2400-2450 MHz segment, the 5.725-5.875 GHz segment, the 1.2 cm band, the 2.5 mm band, or the 244-246 GHz segment must accept interference from industrial, scientific, and medical (ISM) equipment.

(f) Amateur stations transmitting in the following segments must not cause harmful interference to radio astronomy stations: 76-81 GHz, 136-141 GHz, 241-248 GHz, 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz, or 926-945 GHz. In addition, amateur stations transmitting in the following segments must not cause harmful interference to stations in the Earth exploration-satellite service (passive) or the space research service (passive): 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz.

(g) In the 2200 m and 630 m bands:

(1) Amateur stations in the 135.7-137.8 kHz (2200 m) and 472-479 kHz (630 m) bands shall only operate at fixed locations. Amateur stations shall not operate within a horizontal distance of one kilometer from a transmission line that conducts a power line carrier (PLC) signal in the 135.7-137.8 kHz or 472-479 kHz bands. Horizontal distance is measured from the station's antenna to the closest point on the transmission line.

(2) Prior to commencement of operations in the 135.7-137.8 kHz (2200 m) and/or 472-479 kHz (630 m) bands, amateur operators shall notify the Utilities Telecom Council (UTC) of their intent to operate by submitting their call signs, intended band or bands of operation, and the coordinates of their antenna's fixed location. Amateur stations will be permitted to commence operations after the 30-day period unless UTC notifies the station that its fixed location is located within one kilometer of PLC systems operating in the same or overlapping frequencies.

(3) Amateur stations in the 135.7-137.8 kHz (2200 m) band shall not cause harmful interference to, and shall accept interference from:

(i) Stations authorized by the United States Government in the fixed and maritime mobile services;

(ii) Stations authorized by other nations in the fixed, maritime mobile, and radionavigation service.

(4) Amateur stations in the 472-479 kHz (630 m) band shall not cause harmful interference to, and shall accept interference from:

(i) Stations authorized by the FCC in the maritime mobile service;

(ii) Stations authorized by other nations in the maritime mobile and aeronautical radionavigation services.

(5) Amateur stations causing harmful interference shall take all necessary measures to eliminate such interference—including temporary or permanent termination of transmissions.

(h) 60 m band:

(1) In the 5330.5-5349.3 kHz and 5371.5-5406.3 kHz bands (60 m band), amateur stations may transmit on the four center frequencies specified in the table below. In order to meet this requirement, control operators of stations transmitting phone, data, and RTTY emissions (emission designators 2K80J3E, 2K80J2D, and 60H0J2B, respectively) may set the carrier frequency 1.5 kHz below the center frequency as specified in the table below. For CW emissions (emission designator 150HA1A), the carrier frequency is set to the center frequency. Amateur operators shall ensure that their emissions do not occupy more than 2.8 kHz centered on each of these center frequencies.

60 M Band Frequencies (kHz)

Carrier	Center
5330.5	5332.0
5346.5	5348.0
5371.5	5373.0
5403.5	5405.0

(2) Amateur stations transmitting on the 60 m band must not cause harmful interference to, and must accept interference from, stations authorized by:

(i) The United States (NTIA and FCC) and other nations in the fixed service; and

(ii) Other nations in the mobile except aeronautical mobile service.

(i) Amateur stations transmitting in the 7.2-7.3 MHz segment must not cause harmful interference to, and must accept interference from, international broadcast stations whose programming is intended for use within Region 1 or Region 3.

(j) Amateur stations transmitting in the 30 m band must not cause harmful interference to, and must accept interference from, stations by other nations in the fixed service. The licensee of the amateur station must make all necessary adjustments, including termination of transmissions, if harmful interference is caused.

(k) For amateur stations located in ITU Regions 1 and 3: Amateur stations transmitting in the 146-148 MHz segment or the 10.00-10.45 GHz segment must not cause harmful interference to, and must accept interference from, stations of other nations in the fixed and mobile services.

(l) In the 219-220 MHz segment:

(1) Use is restricted to amateur stations participating as forwarding stations in fixed point-to-point digital message forwarding systems, including intercity packet backbone networks. It is not available for other purposes.

(2) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by:

(i) The FCC in the Automated Maritime Telecommunications System (AMTS), the 218-219 MHz Service, and the 220 MHz Service, and television stations broadcasting on channels 11 and 13; and

(ii) Other nations in the fixed and maritime mobile services.

(3) No amateur station may transmit unless the licensee has given written notification of the station's specific geographic location for such transmissions in order to be incorporated into a database that has been made available to the public. The notification must be given at least 30 days prior to making such transmissions. The notification must be given to: The American Radio Relay League, Inc., 225 Main Street, Newington, CT 06111-1494.

(4) No amateur station may transmit from a location that is within 640 km of an AMTS coast station that operates in the 217-218 MHz and 219-220 MHz bands unless the amateur station licensee has given written notification of the station's specific geographic location for such transmissions to the AMTS licensee. The notification must be given at least 30 days prior to making such transmissions. The location of AMTS coast stations using the 217-218/219-220 MHz channels may be obtained as noted in paragraph (l)(3) of this section.

(5) No amateur station may transmit from a location that is within 80 km of an AMTS coast station that uses frequencies in the 217-218 MHz and 219-220 MHz bands unless that amateur station licensee holds written approval from that AMTS licensee. The location of AMTS coast stations using the 217-218/219-220 MHz channels may be obtained as noted in paragraph (l)(3) of this section.

(m) In the 70 cm band:

(1) No amateur station shall transmit from north of Line A in the 420-430 MHz segment. See § 97.3(a) for the definition of Line A.

(2) Amateur stations transmitting in the 420-430 MHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the FCC in the land mobile service within 80.5 km of Buffalo,

Cleveland, and Detroit. See § 2.106, footnote US230 for specific frequencies and coordinates.

(3) Amateur stations transmitting in the 420-430 MHz segment or the 440-450 MHz segment must not cause harmful interference to, and must accept interference from, stations authorized by other nations in the fixed and mobile except aeronautical mobile services.

(n) In the 33 cm band:

(4) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by:

(i) The United States Government;

(ii) The FCC in the Location and Monitoring Service; and

(iii) Other nations in the fixed service.

(5) No amateur station shall transmit from those portions of Texas and New Mexico that are bounded by latitudes 31°41′ and 34°30′ North and longitudes 104°11′ and 107°30′ West; or from outside of the United States and its Region 2 insular areas.

(6) No amateur station shall transmit from those portions of Colorado and Wyoming that are bounded by latitudes 39° and 42° North and longitudes 103° and 108° West in the following segments: 902.4-902.6 MHz, 904.3-904.7 MHz, 925.3-925.7 MHz, and 927.3-927.7 MHz.

(o) Amateur stations transmitting in the 23 cm band must not cause harmful interference to, and must accept interference from, stations authorized by:

(1) The United States Government in the aeronautical radionavigation, Earth exploration-satellite (active), or space research (active) services;

(2) The FCC in the aeronautical radionavigation service; and

(3) Other nations in the Earth exploration-satellite (active), radionavigation-satellite (space-to-Earth) (space-to-space), or space research (active) services.

(p) In the 13 cm band:

(1) Amateur stations must not cause harmful interference to, and must accept interference from, stations authorized by other nations in fixed and mobile services.

(2) Amateur stations transmitting in the 2305-2310 MHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the FCC in the fixed, mobile except aeronautical mobile, and radiolocation services.

(q) In the 5 cm band:

(1) Amateur stations transmitting in the 5.650-5.725 GHz segment must not cause harmful interference to, and must accept interference from, stations authorized by other nations in the mobile except aeronautical mobile service.

(2) Amateur stations transmitting in the 5.850-5.925 GHz segment must not cause harmful interference to, and must accept interference from, stations authorized by the FCC and other nations in the fixed-satellite (Earth-to-space) and mobile services and also stations authorized by other nations in the fixed service. In the United States, the use of mobile service is restricted to operations in the Intelligent Transportation System radio service.

(r) Amateur stations transmitting in the 2.5 mm band must not cause harmful interference to, and must accept interference from, stations authorized by the United States Government, the FCC, or other nations in the fixed, inter-satellite, or mobile services.

Note to § 97.303:

The Table of Frequency Allocations contains the complete, unabridged, and legally binding frequency sharing requirements that pertain to the Amateur Radio Service. See 47 CFR 2.104, 2.105, and 2.106. The United States, Puerto Rico, and the U.S. Virgin Islands are in Region 2 and other U.S. insular areas are in either Region 2 or 3; see appendix 1 to part 97.

§ 97.305 Authorized emission types.

(a) Except as specified elsewhere in this part, an amateur station may transmit a CW emission on any frequency authorized to the control operator.

(b) A station may transmit a test emission on any frequency authorized to the control operator for brief periods for experimental purposes, except that no pulse modulation emission may be transmitted on any frequency where pulse is not specifically authorized and no SS modulation emission may be transmitted on any frequency where SS is not specifically authorized.

(c) A station may transmit the following emission types on the frequencies indicated, as authorized to the control operator, subject to the standards specified in § 97.307(f) and rules promulgated under § 97.609:

Wavelength band	Frequencies	Emission types authorized	Bandwidth authorized	Standards see § 97.307, paragraph(s):
LF				
2200 m	Entire band	RTTY, data	100 Hz	

MF				
630 m	Entire band	Phone, image, RTTY, data	1 kHz	(f)(1),
160 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
HF				
80 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
60 m	5.3515-5.3665 MHz	Phone, image, RTTY, data	2.8 kHz	(f)(2).
60 m	5.332, 5.348, 5.373 and 5.405 MHz	Phone, RTTY, data	2.8 kHz	(f)(2).
40 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
30 m	Entire band	RTTY, data	2.8 kHz	(f)(1),
20 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
17 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
15 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
12 m	Entire band	Phone, image, RTTY, data	6 kHz	(f)(1),
10 m	Entire band	Phone, image, RTTY, data	20 kHz	(f)(1),
VHF				
6 m	50.1-51.0 MHz	MCW, phone, image, RTTY, data	2.8 kHz	(f)(1),
6m	51.0-54.0 MHz	MCW, phone, image, RTTY, data, test	30 kHz	(f)(1),
2 m	Entire band	MCW, phone, image, RTTY, data, test	30 kHz	(f)(1),

1.25 m	219-220 MHz	Data	100 kHz	
1.25 m	222-225 MHz	MCW, phone, image, RTTY, data, SS, test	100 kHz	
UHF				
70 cm	Entire band	MCW, phone, image, RTTY, data, SS, test	12 MHz	
33 cm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	12 MHz	
23 cm	Entire band	MCW, phone, image, RTTY, data, SS, test	Not specified	
13 cm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
SHF				
5 cm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
3 cm	Entire band	MCW, phone, image, RTTY, data, SS, test	Not specified	
1.2 cm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
EHF				
6 mm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
4 mm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	

2.5 mm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
2 mm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
1 mm	Entire band	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	
	Above 275 GHz	MCW, phone, image, RTTY, data, SS, test, pulse	Not specified	

§ 97.307 Emission standards.

(a) No amateur station transmission shall occupy more bandwidth than necessary for the information rate and emission type being transmitted, in accordance with good amateur practice.

(b) Emissions resulting from modulation must be confined to the band or segment available to the control operator. Emissions outside the necessary bandwidth must not cause splatter or keyclick interference to operations on adjacent frequencies.

(c) All spurious emissions from a station transmitter must be reduced to the greatest extent practicable. If any spurious emission, including chassis or power line radiation, causes harmful interference to the reception of another radio station, the licensee of the interfering amateur station is required to take steps to eliminate the interference, in accordance with good engineering practice.

(d) For transmitters installed after January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must be at least 43 dB below the mean power of the fundamental emission. For transmitters installed on or before January 1, 2003, the mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency below 30 MHz must not exceed 50 mW and must be at least 40 dB below the mean power of the fundamental emission. For a transmitter of mean power less than 5 W installed on or before January 1, 2003, the attenuation must be at least 30 dB. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

(e) The mean power of any spurious emission from a station transmitter or external RF power amplifier transmitting on a frequency between 30-225 MHz must be at least 60 dB below the mean power of the fundamental. For a transmitter having a mean power of 25 W or less, the mean power of any spurious emission supplied to the antenna transmission line must not exceed 25 μW and must be at least 40 dB below the mean power of the fundamental emission, but need not be reduced below the power of 10 μW. A transmitter built before April 15, 1977, or first marketed before January 1, 1978, is exempt from this requirement.

(f) The following standards and limitations apply to transmissions on the frequencies specified in § 97.305(c).

(1) No non-phone emission shall exceed the bandwidth of a communications quality phone emission of the same modulation type. The total bandwidth of an independent sideband emission (having B as the first symbol), or a multiplexed image and phone emission, shall not exceed that of a communications quality A3E emission.

(2) In the 60 m band:

(i) A station may transmit only phone, RTTY, data, and CW emissions using the emission designators and any additional restrictions that are specified in the table below (except that the use of a narrower necessary bandwidth is permitted):

Table 1 to Paragraph (f)(14)(i)—60 M Band Emission Requirements

Emission type	Emission designator	Restricted to:
Phone	2K8080J3E	Upper sideband transmissions (USB)
Data	2K80J2D	USB (for example, PACTOR-III)
RTTY	60H0J2B	USB (for example, PSK31).
CW	150HA1A	Morse telegraphy by means of on-off keying

(ii) The following requirements also apply:

(A) When transmitting the phone, RTTY, and data emissions outside 5351.5-5366.5 kHz, the suppressed carrier frequency may be set as specified in § 97.303(h).

(B) The control operator of a station transmitting data or RTTY emissions must exercise care to limit the length of transmission so as to avoid causing harmful interference to United States Government stations.

§ 97.309 RTTY and data emission codes.

(a) Where authorized by § 97.305(c) of the part, an amateur station may transmit a RTTY or data emission using the following specified digital codes:

(1) The 5-unit, start-stop, International Telegraph Alphabet No. 2, code defined in ITU-T Recommendation F.1, Division C (commonly known as “Baudot”).

(2) The 7-unit code specified in ITU-R Recommendations M.476-5 and M.625-3 (commonly known as “AMTOR”).

(3) The 7-unit, International Alphabet No. 5, code defined in IT--T Recommendation T.50 (commonly known as “ASCII”).

(4) An amateur station transmitting a RTTY or data emission using a digital code specified in this paragraph may use any technique whose technical characteristics have been documented publicly, such as CLOVER, G-TOR, or PacTOR, for the purpose of facilitating communications.

(b) Where authorized by § 97.305(c), a station may transmit a RTTY or data emission using an unspecified digital code, except to a station in a country with which the United States does not have an agreement permitting the code to be used. RTTY and data emissions using unspecified digital codes must not be transmitted for the purpose of obscuring the meaning of any communication. When deemed necessary by a Regional Director to assure compliance with the FCC Rules, a station must:

(1) Cease the transmission using the unspecified digital code;

(2) Restrict transmissions of any digital code to the extent instructed;

(3) Maintain a record, convertible to the original information, of all digital communications transmitted.

§ 97.311 SS emission types.

(a) SS emission transmissions by an amateur station are authorized only for communications between points within areas where the amateur service is regulated by the FCC and between an area where the amateur service is regulated by the FCC and an amateur station in another country that permits such communications. SS emission transmissions must not be used for the purpose of obscuring the meaning of any communication.

(b) A station transmitting SS emissions must not cause harmful interference to stations employing other authorized emissions, and must accept all interference caused by stations employing other authorized emissions.

(c) When deemed necessary by a Regional Director to assure compliance with this part, a station licensee must:

(1) Cease SS emission transmissions;

(2) Restrict SS emission transmissions to the extent instructed; and

(3) Maintain a record, convertible to the original information (voice, text, image, etc.) of all spread spectrum communications transmitted.

§ 97.313 Transmitter power standards.

(a) An amateur station must use the minimum transmitter power necessary to carry out the desired communications.

(b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

(c) No station may transmit with a transmitter power output exceeding 200 W PEP:

(1) On the 10.10-10.15 MHz segment; or

(2) When the control operator is a Basic Class operator.

(d) No station may transmit with a transmitter power exceeding 50 W PEP on the UHF 70 cm band from an area specified in paragraph (a) of footnote US270 in § 2.106, unless expressly authorized by the FCC after mutual agreement, on a case-by-case basis, between the Regional Director of the applicable field facility and the military area frequency coordinator at the applicable military base. An Earth station or telecommand station, however, may transmit on the 435-438 MHz segment with a maximum of 611 W effective radiated power (1 kW equivalent isotropically radiated power) without the authorization otherwise required. The transmitting antenna elevation angle between the lower half-power (−3 dB relative to the peak or antenna bore sight) point and the horizon must always be greater than 10°.

(e) No station may transmit with a transmitter power exceeding 50 W PEP on the 33 cm band from within 241 km of the boundaries of the White Sands Missile Range. Its boundaries are those portions of Texas and New Mexico bounded on the south by latitude 31°41′ North, on the east by longitude 104°11′ West, on the north by latitude 34°30′ North, and on the west by longitude 107°30′ West.

(f) No station may transmit with a transmitter power exceeding 50 W PEP on the 219-220 MHz segment of the 1.25 m band.

(g) No station may transmit with an effective radiated power (ERP) exceeding 100 W PEP on the 60 m band. For the purpose of computing ERP, the transmitter PEP will be multiplied by the antenna gain relative to a half-wave dipole antenna. A half-wave dipole antenna will be presumed to have a gain of 1 (0 dBd). Licensees using other antennas must maintain in their station records either the antenna manufacturer's data on the antenna gain or calculations of the antenna gain.

(h) No station may transmit with a transmitter output exceeding 10 W PEP when the station is transmitting a SS emission type.

(i) No station may transmit in the 135.7-137.8 kHz (2200 m) band with a transmitter power exceeding 1.5 kW PEP or a radiated power exceeding 1 W EIRP.

(j) No station may transmit in the 472-479 kHz (630 m) band with a transmitter power exceeding 500 W PEP or a radiated power exceeding 5 W EIRP, except that in Alaska, stations located within 800 kilometers of the Russian Federation may not transmit with a radiated power exceeding 1 W EIRP.

(k) No station may transmit with a peak equivalent isotropically radiated power (EIRP) exceeding 316 W in the 76-81 GHz (4 mm) band.

§ 97.315 Certification of external RF power amplifiers.

(a) Any external RF power amplifier (see § 2.815 of the FCC Rules) manufactured or imported for use at an amateur radio station must be certificated for use in the amateur service in accordance with subpart J of part 2 of the FCC Rules. No amplifier capable of operation below 144 MHz may be constructed or modified by a non-amateur service licensee without a grant of certification from the FCC.

(b) The requirement of paragraph (a) does not apply if one or more of the following conditions are met:

(1) The amplifier is constructed or modified by an amateur radio operator for use at an amateur station.

(2) The amplifier was manufactured before April 28, 1978, and has been issued a marketing waiver by the FCC, or the amplifier was purchased before April 28, 1978, by an amateur radio operator for use at that operator's station.

(3) The amplifier is sold to an amateur radio operator or to a dealer, the amplifier is purchased in used condition by a dealer, or the amplifier is sold to an amateur radio operator for use at that operator's station.

(c) Any external RF power amplifier appearing in the Commission's database as certificated for use in the amateur service may be marketed for use in the amateur service.

§ 97.317 Standards for certification of external RF power amplifiers.

(a) To receive a grant of certification, the amplifier must:

(1) Satisfy the spurious emission standards of § 97.307 (d) or (e) of this part, as applicable, when the amplifier is operated at the lesser of 1.5 kW PEP or its full output power and when the amplifier is placed in the “standby” or “off” positions while connected to the transmitter.

(2) Not be capable of amplifying the input RF power (driving signal) by more than 15 dB gain. Gain is defined as the ratio of the input RF power to the output RF power of the amplifier where both power measurements are expressed in peak envelope power or mean power.

(3) Exhibit no amplification (0 dB gain) between 26 MHz and 28 MHz.

(b) Certification shall be denied when:

(1) The Commission determines the amplifier can be used in services other than the Amateur Radio Service, or

(2) The amplifier can be easily modified to operate on frequencies between 26 MHz and 28 MHz.

§ 97.319 Restriction on the sale of external RF power amplifiers.

In places regulated by the FCC, as described in Appendix 1 to this part, no person shall sell an external RF power amplifier intended for use in the amateur radio service without confirming that the purchaser holds a Full class operator license grant. Sellers shall maintain records of their confirmation for at least 15 months following the sale and promptly present them to the FCC upon request.

Subpart E — Providing Emergency Communications

§ 97.401 Operation during a disaster.

A station in, or within 92.6 km (50 nautical miles) of, Alaska may transmit emissions J3E and R3E on the channel at 5.1675 MHz (assigned frequency 5.1689 MHz) for emergency communications. The channel must be shared with stations licensed in the Alaska-Private Fixed Service. The transmitter power must not exceed 150 W PEP. A station in, or within 92.6 km of, Alaska may transmit communications for tests and training drills necessary to ensure the establishment, operation, and maintenance of emergency communication systems.

§ 97.403 Safety of life and protection of property.

No provision of these rules prevents the use by an amateur station of any means of radiocommunication at its disposal to provide essential communication needs in connection with the immediate safety of human life and immediate protection of property when normal communication systems are not available.

§ 97.405 Station in distress.

(a) No provision of these rules prevents the use by an amateur station in distress of any means at its disposal to attract attention, make known its condition and location, and obtain assistance.

(b) No provision of these rules prevents the use by a station, in the exceptional circumstances described in paragraph (a) of this section, of any means of radiocommunications at its disposal to assist a station in distress.

§ 97.407 Radio amateur civil emergency service.

(a) No station may transmit in RACES unless it is an FCC-licensed primary, club, or military recreation station and it is certified by a civil defense organization as registered with that organization. No person may be the control operator of an amateur station transmitting in RACES unless that person holds a FCC-issued amateur operator license and is certified by a civil defense organization as enrolled in that organization.

(b) The frequency bands and segments and emissions authorized to the control operator are available to stations transmitting communications in RACES on a shared basis with the amateur service. In the event of an emergency which necessitates invoking the President's War Emergency Powers under the provisions of section 706 of the Communications Act of 1934, as amended, 47 U.S.C. 606, amateur stations participating in RACES may only transmit on the frequency segments authorized pursuant to part 214 of this chapter.

(c) An amateur station registered with a civil defense organization may only communicate with the following stations upon authorization of the responsible civil defense official for the organization with which the amateur station is registered:

(1) An amateur station registered with the same or another civil defense organization; and

(2) A station in a service regulated by the FCC whenever such communication is authorized by the FCC.

(d) All communications transmitted in RACES must be specifically authorized by the civil defense organization for the area served. Only civil defense communications of the following types may be transmitted:

(1) Messages concerning impending or actual conditions jeopardizing the public safety, or affecting the national defense or security during periods of local, regional, or national civil emergencies;

(2) Messages directly concerning the immediate safety of life of individuals, the immediate protection of property, maintenance of law and order, alleviation of human suffering and need, and the combating of armed attack or sabotage;

(3) Messages directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or other authorized governmental or relief agencies; and

(4) Communications for RACES training drills and tests necessary to ensure the establishment and maintenance of orderly and efficient operation of the RACES as ordered by the responsible civil defense organization served. Such drills and tests may not exceed a total time of 1 hour per week. With the approval of the chief officer for emergency planning in the applicable State,

Commonwealth, District or territory, however, such tests and drills may be conducted for a period not to exceed 72 hours no more than twice in any calendar year.

Subpart F — Qualifying Examination Systems

§ 97.501 Qualifying for an amateur operator license.

Each applicant must pass an examination for a new amateur operator license grant and for each change in operator class. Each applicant for the class of operator license grant specified below must pass, or otherwise receive examination credit for, the following examination elements:

(a) Full Class operator: Elements 5 and 6;

(b) Basic Class operator: Element 5.

§ 97.503 Element standards.

A written examination must be such as to prove that the examinee possesses the operational and technical qualifications required to perform properly the duties of an amateur service licensee. Each written examination must be comprised of a question set as follows:

(a) Element 5: A minimum of 50 questions concerning the privileges of a Basic Class operator license. The minimum passing score is 75 percent of the questions answered correctly.

(b) Element 6: A minimum of 50 questions concerning the privileges of a Full Class operator license. The minimum passing score is 75 percent of the questions answered correctly.

The ARA may specify that an element contain more than the minimum number of questions when necessary to adequately test the required material.

§ 97.505 Element credit.

(a) The administering VEs must give credit as specified below to an examinee holding any of the following license grants:

Operator class	Unexpired (or within the renewal grace period)	Expired and beyond the renewal grace period
(1) Full	Not applicable	Element 6.
(2) Basic	Element 5	No credit.
(3) Amateur extra	Not applicable	Element 6

(4) Advanced	Elements 5 and 6	Element 6.
(5) General; or Technician granted before March 21, 1987	Element 5	No credit.
(6) Technician Plus; or Technician granted on or after March 21, 1987	Element 5	No credit.

(b) The administering VEs must give credit to an examinee holding a CSCE for each element the CSCE indicates the examinee passed within the previous 365 days.

§ 97.511 Examinee conduct.

Each examinee must comply with the instructions given by the administering VEs.

§ 97.514 Coordinating examination sessions.

(a) A VEC must coordinate the efforts of VEs in preparing and administering examinations.

(b) At the completion of each examination session, the coordinating VEC must collect applicant information and test results from the administering VEs. The coordinating VEC must:

(1) Screen collected information;

(2) Resolve all discrepancies and verify that the VEs' certifications are properly completed; and

(3) For qualified examinees, forward electronically all required data to the FCC. All data forwarded must be retained for at least 15 months and must be made available to the FCC upon request.

(c) Each VEC must make any examination records available to the FCC, upon request

(d) The FCC may:

(1) Administer any examination element itself;

(2) Readminister any examination element previously administered by VEs, either itself or under the supervision of a VEC or VEs designated by the FCC; or

(3) Cancel the operator/primary station license of any licensee who fails to appear for readministration of an examination when directed by the FCC, or who does not successfully complete any required element that is readministered. In an instancce of such cancellation, the person will be granted an operator/primary station license consistent with completed examination elements that have not been invalidated by not appearing for, or by failing, the examination upon readministration.

§ 97.516 Question pools.

The ARA and all VECs must cooperate in maintaining one question pool for each written examination element. Each question pool must contain at least 10 times the number of questions required for a single examination. Each question pool must be published and made available to the public prior to its use for making a question set. Each question on each VEC question pool must be prepared by a VE holding a Full Class operator license.

§ 97.518 Accrediting VEs.

(a) No VEC may accredit a person as a VE if:

(1) The person does not meet minimum VE statutory qualifications or minimum qualifications as prescribed by this part;

(2) The FCC or ARA does not accept the voluntary and uncompensated services of the person;

(3) The VEC determines that the person is not competent to perform the VE functions; or

(4) The VEC determines that questions of the person's integrity or honesty could compromise the examinations.

(b) Each VEC must seek a broad representation of amateur operators to be VEs. No VEC may discriminate in accrediting VEs on the basis of race, sex, religion or national origin; nor on the basis of membership (or lack thereof) in an amateur service organization; nor on the basis of the person accepting or declining to accept reimbursement.

§ 97.520 Reimbursement for expenses.

VEs and VECs may be reimbursed by examinees for out-of-pocket expenses incurred in preparing, processing, administering, or coordinating an examination for an amateur operator license.

Subpart G — Amateur Radio Administrator

§ 97.601 Designation of the Amateur Radio Administrator.

The FCC will designate a qualified organization having tax-exempt status under section 501(c)(3) of the Internal Revenue Code of 1986 to act as the Amateur Radio Administrator (ARA), with the duties and responsibilities detailed in this subpart.

§ 97.603 Amateur Radio Licensing System.

(a) The ARA shall develop and maintain the Amateur Radio Licensing System (ARLS).

(b) Upon acceptance of the ARLS by the FCC, license grants and call sign assignments in the amateur radio service shall be recorded in the ARLS rather than the ULS.

(c) The following information shall be accessible from the ARLS to the general public via the internet for any license grant or call sign assignment that is currently active or has been canceled for less than 2 years:

(1) Call sign.

(2) Name of the operator, club station, or military recreation station.

(3) Current mailing address or current email address registered with the ARA.

(4) Effective, expiration, and cancellation dates of the license grant or call sign assignment.

(5) For club and military recreation stations, the name, call sign, and current mailing address or current email address of the station trustee.

(6) For special event callsign assignments, the name, call sign, and current mailing address of the trustee of the callsign.

(d) In addition to the information in paragraph (c), the ARA shall maintain records of current and prior contact information associated with license grants, as well as a complete history of changes made to records in the ARLS.

(e) The ARA shall provide current and prior contact information for any operator, club station, or military recreation station to the FCC immediately upon request.

(f) Except for the information specified in paragraphs (c) or (e), the ARA shall exercise due care to protect information held in the ALRS from public disclosure, unless otherwise authorized by the subject licensee.

§ 97.605 Administration of License Grants.

(a) The ARA shall issue and renew license grants in the amateur radio service on behalf of the FCC in accordance with the rules of this Part.

(b) The ARA shall revoke or decline to renew specific license grants when directed to do so by the FCC.

(c) The ARA may revoke, restrict the privileges of, or decline to renew specific license grants when it becomes aware of material breaches of the rules set forth by this Part. However, no such revocation, restriction, or nonrenewal shall be acted upon unless the licensee has a chance to respond to accusations of or remedy such breaches in accordance with the general rules of due process.

(d) The ARA shall establish and maintain forms and procedures governing the process by which an applicant or licensee applies for or seeks modification or renewal of a license grant.

(e) A person whose amateur station license grant has expired may apply to the ARA for renewal of the license grant for another term during a 2 year filing grace period. Unless and until the license grant is renewed, no privileges in this part are conferred.

§ 97.607 Assignment of Call Signs.

(a) The following blocks of call signs are available for assignment for amateur stations

Composition of call sign[2]	Call sign blocks	Comments
1 letter, 1 digit, 1 letter	K1A through K0Z. N1A through N0Z. W1A through W0Z.	Letter “X” may not follow digit Special event use only.
1 letter, 1 digit, 2 letters	K1AA through K0ZZ. N1AA through K0ZZ. W1AA through W0ZZ.	
1 letter, 1 digit, 3 letters	K1AAA through K0ZZZ. N1AAA through K0ZZZ. W1AAA through W0ZZZ.	
2 letters, 1 digit, 1 letter	AA1A through AL0Z. KA1A through KZ0Z. NA1A through NZ0Z. WA1A through WZ0Z.	
2 letters, 1 digit, 2 letters	AA1AA through AL0ZZ. KA1AA through KZ0ZZ.	KG4AA-KG4ZZ are reserved for use by amateur stations

[2] Plus other identifying data as may be specified.

	NA1AA through NZ0ZZ. WA1AA through WZ0ZZ.	authorized by the United States Navy at Guantanamo Bay.
2 letters, 1 digit, 3 letters	AA1AAA through AL0ZZZ. KA1AAA through KZ0ZZZ. NA1AAA through NZ0ZZZ. WA1AAA through WZ0ZZZ.	Letter “X” may not follow digit. KC4AAA-KC4AAF are reserved for use amateur stations authorized by the National Science Foundation KC4USA-KC4USV are reserved for use by amateur stations authorized by the United States Navy Callsigns with letter “F” preceding the digit and letters “EMA” following the digit are reserved for use by amateur stations authorized by the Federal Emergency Management Agency.
2 letters 2 or 3 digits 2, 3, or 4 letters	AA11AA through AL000ZZZZ. NA11AA through NZ000ZZZZ.	Special event use only.

(b) The ARA may specify guidelines regarding the eligibility for certain ranges of call signs, consistent with the constraints in paragraph (a), based on operator class, kind of station, and location of station.

(c) The ARA shall publish and maintain guidelines and procedures for the assignment of call signs via a sequential call sign system, a vanity call sign system, and a special event call sign system.

(d) The ARA shall not assign or renew call signs that are or could be confused with obscene or offensive terms, or that are recognized as infamous within the amateur radio service due to egregious behavior by prior call sign holders.

(e) Guidelines and procedures implemented in paragraphs (b) and (c) must have the intent of clearly identifying stations and avoiding confusion of the identification of current and former holders of call signs. The ARA may consider tradition and international amateur radio practice in the establishment of these guidelines and procedures, but under no circumstances shall these guidelines or procedures be excessively burdensome on or unfairly discriminatory towards licensees.

(f) Except as provided elsewhere in this part, a call sign obtained under the sequential or vanity call sign system of the FCC or ARA will be reassigned to the station upon renewal or modification of a station license. Changes to guidelines specified in paragraphs (b) and (c) shall not require a station to change a previously assigned call sign.

§ 97.609 Maintenance of Frequency Authorizations

The ARA may issue rules restricting the use of portions of the frequency bands specified in § 97.301 to certain emission types or bandwidths, or to constrain the use of portions of those frequency bands for special operations listed in Subpart C. Such rules:

(a) Shall not authorize operations otherwise prohibited under this part;

(b) Shall be harmonious with international amateur radio practices;

(c) Shall give consideration to the shared nature of spectrum authorized for amateur use, and the ability of amateurs to modify their operations to avoid harmful interference with other stations;

(d) Shall be regularly reviewed for continued appropriateness and revised when necessary; and

(e) Shall not require membership in any amateur radio service organization as a precondition for transmitting in any specified frequency range or of any emission type

§ 97.611 Database of Ciphers and Encryption Keys

(a) The ARA shall maintain a database of information necessary to decode messages specified in § 97.113(a)(6)(ii).

(b) Information from the database shall be provided to the FCC upon request.

(c) Information sufficient to decode encoded messages shall be available to all licensed amateur operators.

§ 97.613 Oversight of Examinations.

(a) The ARA shall establish and maintain rules regarding:

(1) The preparation of examinations under Subpart F;

(2) The requirements for VEs administering exams;

(3) The coordination of examination sessions; and

(4) The qualifications of VECs;

(b) Rules established in paragraph (a) shall

(1) Require that VEs administering exams must accommodate examinees whose physical disabilities require a special examination procedure. The administering VEs may require a physician's certification indicating the nature of the disability before determining which, if any, special procedures must be used;

(2) Require that VEs administering exams issue a CSCE to an examinee who scores a passing grade on an examination element;

(3) Require that after the administration of a successful examination for an amateur radio license, the administering VEs submit the application document to the coordinating VEC according to the coordinating VEC's instructions; and

(4) Require that every examinee qualified under this part is registered without regard to race, sex, religion, national origin or membership (or lack thereof) in any amateur service organization.

(c) The ARA shall establish a detailed syllabus of topics to be covered in Elements 5 and 6. The syllabus shall be updated from time to time to reflect advancement and development of amateur radio practices.

(d) The ARA may specify a syllabus for Element 6 consistent with the syllabus specified by CEPT for a HAREC.

If CEPT accepts evidence of passing Elements 5 and 6 as qualification for a HAREC, the ARA may

(1) Accept HARECs issued by CEPT members as a CSCE for Elements 5 and 6 for purposes of issuing an operator/primary station license grant under this part;

(2) Issue a document consistent with the specifications of a HAREC certifying the examinee has passed Elements 5 and 6 when Element 6 complies with the HAREC syllabus; and

(3) Permit holders of Full Class operator/primary station grants who received credit for Element 6 prior to CEPT acceptance for HAREC to voluntarily be reexamined with Element 6 as a prerequisite for issuance of the document in paragraph (2). If the person being voluntarily reexamined fails the exam, they shall not have their Full Class status revoked.

(e) All records regarding examination sessions must be maintained by the ARA or the VEC as appropriate for at least 15 months and be provided to the FCC upon request.

(f) The FCC or ARA may:

(1) Administer any examination element itself;

(2) Readminister any examination element previously by VEs, either itself or under the supervision of a VEC or VEs designated by the FCC or ARA; or

(3) Cancel the operator/primary station license of any licensee who fails to appear for readministration of exam when directed by the FCC or ARA, or who does not successfully complete any required element that is readministered. In the instance of such cancellation, the person will be granted an operator/primary station license consistent with completed examination elements that have not been invalidated by not appearing for, or by failing, the examination upon readministration.

§ 97.615 Establishment of Policies and Procedures.

(a) The ARA shall prepare and maintain a code of rules detailing the policies and procedures it will use when performing its duties and responsibilities under this subpart. These rules shall be the minimum necessary to govern the performance of the duties and responsibilities of the Administrator and to reflect good amateur practice.

(b) The code of rules shall be readily accessible to the public and shall conform with FCC regulations.

(c) Creation or revision of rules under this section shall be subject to the following procedure:

(1) General notice of the proposed rule making shall be published on a publicly accessible website created for this purpose. This notice shall include:

(i) Either the terms or substance of the proposed rule or a description of the subjects and issues involved; and

(ii) A summary of not more than 100 words in length of the proposed rule, in plain language.

(2) After the required notice is given, the ARA shall give interested persons an opportunity to participate in the rule making through the submission of written data, views, or arguments.

(3) The process by which the interested persons participate in rule making shall be similar to that used by the FCC in its rulemaking.

(4) Rules shall be published on the same website as described in paragraph (1) not less than 30 days before their effective date except:

(i) A substantive rule which grants or recognizes an exemption or relieves a restriction; or

(ii) Interpretative rules and statements of policy.

§ 97.617 Funding the Operations of the Amateur Radio Administrator.

(a) The ARA shall annually prepare a budget describing anticipated revenues and expenditures associated with its operations. The budget shall be published on a publicly accessible website.

(b) The ARA shall not charge a fee for individual queries made against the ARLS.

(c) The ARA shall not charge a fee for access to the question pools for Elements 5 and 6.

(d) The ARA shall not charge a fee for amateur radio operators to access the information specified in § 97.611(c).

(e) The ARA shall not require membership in any amateur radio service organization as a condition of

(1) Receiving, renewing, or modifying a license grant;

(2) Accessing the question pools for Elements 5 and 6;

(3) Accessing the ARLS;

(4) Accessing the code of rules described in § 97.615(a); or

(5) Participating in the rule making procedure described in § 97.615(c).

(f) The ARA may charge a fee for issuing, renewing, or modifying a license grant.

(g) The ARA may charge a fee for registering the means to decode a message as provided in § 97.611(a).

(h) The ARA may solicit voluntary donations.

(i) Fees and donations received by the ARA shall not exceed the amount expected to be required for its reasonable operating expenses.

Subpart G — Transition Rules.

§ 97.701 Applicability

Rules in this subpart govern the transition of licensees and holders of CSCEs as of [date] to the updated provisions of this part on that date.

§ 97.703 License Classes.

(a) Holders of Novice, Technician, or General class licenses are considered to hold Basic class licenses and may operate with the authorizations associated with the Basic class license and other provisions of this part.

(b) Holders of Advanced or Amateur Extra class licenses are considered to hold Full class licenses and may operate with the authorizations associated with the Full class license and other provisions of this part.

§ 97.705 Call Signs.

(a) Call signs currently assigned to operators, club stations, and military recreation stations as of [date] remain assigned to those operators and stations.

(b) Call signs described in paragraph (a) may be retained when the operator or station license grant is subsequently renewed even though the call signs may not comply with guidelines adopted by the ARA under § 97.607.

§ 97.707 CSCEs and Examinations.

(a) CSCEs issued for passing Elements 2 or 3 shall be considered a CSCE for passing Element 5.

(b) CSCEs issued for passing Element 4 shall be considered a CSCE for passing Element 6.

§ 97.709 VEC qualifications.

Rules established under § 97.609(a)(4) shall be no burdensome than the standards previously used by the FCC.

Appendix 1 to Part 97—Places Where the Amateur Service is Regulated by the FCC

In ITU Region 2, the amateur service is regulated by the FCC within the territorial limits of the 50 United States, District of Columbia, Caribbean Insular areas [Commonwealth of Puerto Rico, United States Virgin Islands (50 islets and cays) and Navassa Island], and Johnston Island (Islets East, Johnston, North and Sand) and Midway Island (Islets Eastern and Sand) in the Pacific Insular areas.

In ITU Region 3, the amateur service is regulated by the FCC within the Pacific Insular territorial limits of American Samoa (seven islands), Baker Island, Commonwealth of Northern Mariana Islands, Guam Island, Howland Island, Jarvis Island, Kingman Reef, Palmyra Island (more than 50 islets) and Wake Island (Islets Peale, Wake and Wilkes).